

**SEMINOLE COUNTY GOVERNMENT
AGENDA MEMORANDUM****SUBJECT:** FPL Right of Way Consent Agreement Lake Hayes**DEPARTMENT:** Environmental Services**DIVISION:** Planning Engineering Inspections**AUTHORIZED BY:** John Cirello**CONTACT:** Patty Leviti**EXT:** 2132**MOTION/RECOMMENDATION:**

Approve and authorize the Chairman to execute a Memorandum of Right-of-Way Consent Agreement and Right-of-Way Consent Agreement needed in conjunction with CIP Project "Consumer/Lake Hayes 24-Inch Water Transmission Main-Phase 2".

District 1 Bob Dallari

Dennis Westrick

BACKGROUND:

As part of the Consumer/Lake Hayes 24-Inch Water Transmission Main-Phase 2 Project, a Consent Agreement from Florida Power and Light Company will be required for construction and future maintenance. Attached are the Memorandum of Right-of-Way Consent Agreement and Right-of-Way Consent Agreement with the Exhibits.

STAFF RECOMMENDATION:

Staff recommends the Board approve and authorize the Chairman to execute a Memorandum of Right-of-Way Consent Agreement and Right-of-Way Consent Agreement needed in conjunction with CIP Project "Consumer/Lake Hayes 24-Inch Water Transmission Main-Phase 2".

ATTACHMENTS:

1. FPL ROW Consent Agreement Consumers - Lake Hayes WTM-Ph II

Additionally Reviewed By:☒ County Attorney Review (Susan Dietrich)

This Instrument Prepared By:
Brett Coomer - CRE/CSN
Florida Power & Light Company
P.O. Box 2851
Daytona Beach, FL 32120-2851

MEMORANDUM OF RIGHT-OF-WAY CONSENT AGREEMENT

THIS MEMORANDUM OF RIGHT-OF-WAY CONSENT AGREEMENT dated this ____ day of _____, 2008, by and between SEMINOLE COUNTY, (hereinafter referred to as "Licensee"), and FLORIDA POWER & LIGHT COMPANY, a Florida corporation (hereinafter referred to as "Company").

WITNESSETH:

WHEREAS, on the __ day of _____, 2008, Company and Licensee entered into a written Right-of-Way Consent Agreement, hereinafter referred to as the "Agreement" related to certain property situated in the County of Seminole, State of Florida as more particularly set forth in said Agreement and described in Exhibit "A" attached hereto and made a part hereof and hereinafter referred to as the "Lands", and

WHEREAS, the parties are desirous of placing their interest therein as a matter of public record.

NOW THEREFORE, in consideration of the mutual covenants herein contained and the parties intending to be legally bound thereby, the parties hereto agree as follows:

1. The property described in Exhibit "A" is subject to a right-of-way in favor of Company recorded in O.R. Book 132 at Page 394, O.R. Book 133 at Page 236, O.R. Book 134 at Page 42, O.R. Book 143 at Page 251 and O.R. Book 183 at Page 127, Public Records of Seminole County, Florida.
2. The Agreement provides, among other things, Licensee's right to construct certain improvements upon the Lands including, but not limited to installation of a 24" water transmission main running parallel in southern most ten foot (10') of FPL easement as subject to certain conditions and restrictions.
3. The Agreement is assignable to purchasers of all or a portion of the Lands provided that the purchasers assume the obligations under the Agreement and specifically acknowledge and agree that the use of the property and improvements to be placed on the property are strictly limited to those items within easement from structures A35X5 – A33X8 and B35X1 – B33X8 and are otherwise subject to the terms of the Agreement.

IN WITNESS WHEREOF, the parties have executed this Memorandum of Agreement on the date hereinabove written.

Witnesses:

Company:
FLORIDA POWER & LIGHT COMPANY

Signature

By: _____
Its: Corporate Real Estate Manager
Print Name: J. T. Corson

Name (Print):

Signature

Name (Print):

ATTEST:

LICENSEE:

BOARD OF COUNTY COMMISSIONERS
SEMINOLE COUNTY, FLORIDA

MARYANNE MORSE
Clerk to the Board of
County Commissioners of
Seminole County, Florida

By: _____
BRENDA CAREY, Chairman

Date: _____

For the use and reliance
of Seminole County only.

As authorized for execution by the Board of County
Commissioners at its _____, 2008, regular
meeting.

Approved as to form and legal sufficiency.

County Attorney

State of Florida)
)ss:
County of Palm Beach)

On this _____ day of _____, 2008, before me, the undersigned Notary Public, personally appeared J. T. Corson, Corporate Real Estate Manager of Florida Power & Light Company, a Florida corporation, personally known to me to be the person who subscribed to the foregoing instrument and acknowledged that he executed the same on behalf of said corporation and that he was duly authorized to do so.

In Witness Whereof, I hereunto set my hand and official seal.

(seal)

NOTARY PUBLIC, STATE OF FLORIDA

Print Name: _____

Commission No.: _____

My Commission Expires:

State of)
)ss:
County of _____)

On this _____ day of _____, 2008, before me, the undersigned notary public, personally appeared _____, _____ personally known to me to be the person who subscribed to the foregoing instrument and acknowledged that she executed the same on behalf of said corporation and that she was duly authorized to do so.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

(seal)

NOTARY PUBLIC, STATE OF

Print Name: _____

Commission No.: _____

My Commission Expires:

Exhibit A

Legal Description

A right- of- way 110 feet in width being more particularly described as the South 110 feet of Lot 111, Slavia Colony's Co's. Subdivision as recorded in Plat Book 2, Page 71, public records of Seminole County.

Also A right-of-way 110 feet in width being more particularly described as the South 110 feet of Lot 8, Slavia Colony's Co's. Subdivision as recorded in Plat Book 2, Page 71, public records of Seminole County, Florida.

Also A right-of-way 110 feet in width being more particularly described as the South 110 feet of the N $\frac{1}{2}$ of the NW $\frac{1}{4}$ of Section 28, Township 21 South, Range 31 East, Seminole County, Florida.

Also A right-of-way 110 feet in width being more particularly described as the South 110 feet of the East 9 chains of the NW $\frac{1}{4}$ of the NE $\frac{1}{4}$ of Section 28, Township 21 South, Range 31 East, Seminole County, Florida.

Also A right-of-way 110 feet in width more particularly described as the South 110 feet of the N $\frac{1}{2}$ of the S $\frac{1}{2}$ of the NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 27, Township 21 South, Range 31 East, Seminole County, Florida.

Line Name: Poinsett – Sanford 1, 2, & 3
Structure No.: A33X8 – A35X5 and B35X1 – B33X8
Section(s), Township, Range: 27-21S-31E, 28-21S-31E, 29-21S-31E

RIGHT-OF-WAY CONSENT AGREEMENT

FLORIDA POWER & LIGHT COMPANY, a Florida corporation, whose mailing address is P.O. Box 14000, Juno Beach, Florida 33408-0420, Attn: Corporate Real Estate Department hereinafter referred to as "Company", hereby consents to SEMINOLE COUNTY, whose mailing address is 1101 East First Street, Sanford, FL 32771 hereinafter referred to as "Licensee", using an area within Company's right-of-way granted by that certain agreement recorded in O.R. Book 132 at Page 394, O.R. Book 133 at Page 236, O.R. Book 134 at Page 42, O.R. Book 143 at Page 251, and O.R. Book 183 at Page 127, Public Records of Seminole County, Florida. The said area within, and located to the edge of, Company's right-of-way is hereinafter referred to as the "Lands". The use of the Lands by Licensee shall be solely for the purpose of installing 24" water transmission main running parallel in southern most ten feet (10') of FPL easement as shown on the plans and specifications submitted by Licensee and drawn by Rockett & Associates, c/o R. Kent Veech, P.E., dated September 2007, attached hereto as Exhibit "A".

In consideration for Company's consent and for the other mutual covenants set forth below, and for Ten Dollars and No Cents (\$10.00) and other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, the parties hereto agree as follows:

1. Licensee agrees to obtain all necessary rights from the owners of the Lands in the event Licensee does not own said Lands; to obtain any and all applicable federal, state, and local permits required in connection with Licensee's use of the Lands; and at all times, to comply with all requirements of all federal, state, and local laws, ordinances, rules and regulations applicable or pertaining to the use of the Lands by Licensee pursuant to this Agreement.

2. Licensee understands and agrees that the use of the Lands pursuant to this Agreement is subordinate to the rights and interest of Company in and to the Lands and agrees to notify its employees, agents, and contractors accordingly. Company specifically reserves the right to maintain its facilities located on the Lands; to make improvements; add additional facilities; maintain, construct or alter roads; maintain any facilities, devices, or improvements on the Lands which aid in or are necessary to Company's business or operations; and the right to enter upon the Lands at all times for such purposes. Licensee understands that in the exercise of such rights and interest, Company from time-to-time may require Licensee, to relocate, alter, or remove its facilities and equipment, including parking spaces and areas, and other improvements made by Licensee pursuant to this Agreement which interfere with or prevent Company, in its opinion, from properly and safely constructing, improving, and maintaining its facilities. Licensee agrees to relocate, alter, or remove said facilities, equipment, parking spaces and areas, and other improvements within one (1) year of receiving notice from Company to do so. Such relocation, alteration, or removal will be made at the sole cost and expense of Licensee and at no cost and expense to Company; provided however, should Licensee, for any reason, fail to make such relocation, alteration, or removal, Company retains the right to enter upon the Lands and make said relocation, alteration, or removal of Licensee's facilities, equipment, parking spaces and areas, and other improvements and Licensee hereby agrees to reimburse Company for all of its costs and expense incurred in connection therewith upon demand.

3. Licensee agrees that it will not use the Lands in any manner which, in the opinion of Company, may tend to interfere with Company's use of the Lands or may tend to cause a hazardous condition to exist. Licensee agrees that no hazardous substance, as the term is defined in Section 101 (14) of the Comprehensive Environmental Response Compensation and Liability Act ("CERCLA") (42 USC Section 9601 [14]), petroleum products, liquids or flammables shall be placed on, under, transported across or stored on the Lands, which restricts, impairs, interferes with, or hinders the use of the Lands by Company or the exercise by Company of any of its rights thereto. Licensee agrees further that in the event it should create a hazardous condition, then upon notification by Company, Licensee shall, within seventy-two (72) hours, at its sole cost and expense, correct such condition or situation; provided however that the Company retains the right to enter upon the Lands and correct any such condition or situation at any time and, by its execution hereof, Licensee hereby agrees, to the extent permitted by Florida law, to indemnify and hold harmless Company from all loss, damage or injury resulting from Licensee's failure to comply with the provisions of this Agreement.

4. Licensee hereby agrees and covenants to prohibit its agents, employees, and contractors from using any tools, equipment, or machinery on the Lands capable of extending greater than fourteen (14) feet above existing grade and further agrees that no dynamite or other explosives shall be used within the Lands and that no alteration of the existing terrain, including the use of the Lands by Licensee as provided herein, shall be made which will result in preventing Company access to its facilities located within said Lands. Unless otherwise provided herein, Licensee agrees to maintain a forty (40) foot wide setback, twenty (20) feet on each side, from Company's facilities.

5. Trees, shrubs, and other foliage planted or to be planted upon the Lands by Licensee are not to exceed, at maturity, a height of fourteen (14) feet above existing grade. Licensee hereby agrees to maintain the height of all vegetation on the Lands at a height not to exceed fourteen (14) feet above existing grade.

6. Outdoor lighting installed or to be installed upon the Lands by Licensee are not to exceed a height of fourteen (14) feet above existing grade and all poles or standards supporting light fixtures are to be of a non-metallic material.

7. Sprinkler systems installed or to be installed by Licensee upon the Lands are to be constructed of a non-metallic material and sprinkler heads are to be set so the spray height does not exceed fourteen (14) feet above existing grade and does not make contact with any Company's facilities. Aboveground systems shall not be installed within or across Company patrol or finger roads and underground systems crossing said patrol and finger roads are to be buried at a minimum depth of one (1) foot below existing road grade.

8. Licensee agrees to warn its employees, agents, contractors and invitees of the fact that the electrical facilities and appurtenances installed or to be installed by Company within the Lands are of high voltage electricity and agrees to use all safety and precautionary measures when working under or near Company's facilities.

9. Licensee agrees, at all times, to maintain and keep the Lands clean and free of debris caused by Licensee, its agent employees, contractors, sub-contractors and invitees.

10. The use of the Lands by Licensee shall be at the sole risk and expense of Licensee, and Company is specifically relieved of any responsibility for damage or loss to Licensee or other persons resulting from Company's use of the Lands for its purposes.

11. Notwithstanding any provision contained herein, Licensee agrees to reimburse Company for all cost and expense for any damage to Company's facilities resulting from Licensee's use of the Lands and agrees that if, in the opinion of Company, it becomes necessary as a result of Licensee's use of the Lands for Company to relocate, rearrange or change any of its facilities, to promptly reimburse Company for all cost and expense involved with such relocation, rearrangement or change.

12. Licensee agrees it will exercise its privileges hereunder at its own sole risk and agrees to indemnify (subject to the limitations of Section 768.28 of Florida Statutes) and save harmless Company, its parent, subsidiaries, affiliates, and their respective officers, directors, agents and employees (hereinafter referred to as "FPL Entities"), from all liability, loss, cost, and expense, including attorneys' fees, which may be sustained by FPL Entities to any person, natural or artificial, by reason of the death of or injury to any person or damage to any property as permitted by Florida law arising out of or in connection with the herein described purposes by Licensee, its contractors, agents, or employees; and Licensee agrees to defend at its sole cost and expense and at no cost and expense to FPL Entities any and all suits or action instituted against FPL Entities, for the imposition of such liability, loss, cost and expense.

13. Licensee is self-insured and will provide Company with letter confirming such self insurance in form reasonably satisfactory to FPL's Risk Management Department. Licensee shall, during the period of this Agreement, cause its contractors to maintain at such contractor's sole expense a liability policy with minimum limits of \$2,000,000 for bodily injury or death of person(s) and \$2,000,000 for property damage arising out of a single occurrence. Licensee's contract with such contractors shall include a provision that the contractors agrees to exercise its privileges hereunder at its own sole risk and agrees to indemnify and save harmless Licensee and Company, its parent, subsidiaries, affiliates, and their respective officers, directors, agents and employees (the latter being hereinafter referred to as the "FPL Entities"), from all liability, loss, cost, and expense, including attorneys' fees, which may be sustained by FPL Entities to any person, natural or artificial, by reason of the death of or injury to

any person or damage to any property, whether or not due to or caused by the negligence of FPL Entities, arising out of or in connection with the herein described purposes; and contractor agrees to defend at its sole cost and expense and at no cost and expense to FPL Entities any and all suits or action instituted against FPL Entities, for the imposition of such liability, loss, cost and expense. Contractor's indemnity obligation per occurrence shall not exceed the sum of Two Million Dollars (\$2,000,000.00) for claims arising from a single occurrence. The limits of contractor's indemnity obligations under this section shall not apply to or limit contractor's responsibility for attorneys' fees and costs. The selection of counsel by contractor or by its insurer to represent and defend the FPL Entities shall be subject to the prior written approval of Company. Contractor's obligations under this Section shall survive expiration or other termination of this agreement between contractor and Licensee.

All such policies of insurance shall be endorsed to insure against obligations assumed by contractor in the indemnity. A certificate of insurance shall be furnished to Company evidencing that said policy of insurance is in force and will not be cancelled or materially changed so as to affect the interests of FPL Entities until ten (10) days written notice has been furnished to Company. Upon request, copies of policies will be furnished to Company. Licensee understands and agrees that the use of the Lands for the purposes described herein is expressly contingent upon acceptance and compliance with the provisions contained herein.

14. This Agreement will become effective upon execution by Company and Licensee and will remain in full force and effect until completion of Licensee's use of the Lands pursuant to this Agreement, unless earlier terminated upon ninety (90) days written notice by Company to Licensee, or at the option of Company, immediately upon Licensee failing to comply with or to abide by any or all of the provisions contained herein.

15. The use granted herein as shown on Exhibit "A" shall be under construction by Licensee within one (1) year of the effective date of this Agreement and the construction shall be diligently pursued to completion. Licensee shall give Company ten (10) days prior written notice of its commencement of construction. "Under construction" is the continuous physical activity of placing the foundation or continuation of construction above the foundation of any structure or improvement permitted hereunder. Under construction does not include application for or obtaining a building permit, a site plan approval or zoning approval from the appropriate local government agency having jurisdiction over the activity, purchasing construction materials, placing such construction materials on the site, clearing or grading the site (if permitted) in anticipation of construction, site surveying, landscaping work or reactivating construction after substantially all construction activity has remained stopped for a period of two (2) months or more. Licensee acknowledges that failure to have the use under construction within the one (1) year time period will result in immediate termination of this Agreement in accordance with Paragraph 14 herein for failing to comply with the provisions contained herein unless Licensor grants a written extension for a mutually agreed upon time. Any request for an extension of time shall be submitted in writing by Licensee no later than thirty (30) days prior to the expiration of the one (1) year period for the project to be under construction.

16. The term "Licensee" shall be construed as embracing such number and gender as the character of the party or parties require(s) and the obligations contained herein shall be absolute and primary and shall be complete and binding as to each, including its successors and assigns, upon this Agreement being executed by Licensee and subject to no conditions precedent or otherwise.

17. Should any provision of this Agreement be determined by a court of competent jurisdiction to be illegal or in conflict with any applicable law, the validity of the remaining provisions shall not be impaired. In the event of any litigation arising out of enforcement of this Consent Agreement, the prevailing party in such litigation shall be entitled to recovery of all costs, including reasonable attorneys' fees.

18. Licensee may assign its rights and obligations under this Agreement to a solvent party upon prior written consent of the company, which consent shall not be unreasonably withheld.

The parties have executed this Agreement this _____ day of _____, 2008.

Witnesses:

Signature: _____

Print Name: _____

Signature: _____

Print Name: _____

FLORIDA POWER & LIGHT COMPANY

By: _____

Its: Corporate Real Estate Project Manager

Print Name: J. T. Corson

ATTEST:

LICENSEE:

**BOARD OF COUNTY COMMISSIONERS
SEMINOLE COUNTY, FLORIDA**

MARYANNE MORSE
Clerk to the Board of
County Commissioners of
Seminole County, Florida

By: _____
BRENDA CAREY, Chairman

Date: _____

For the use and reliance
of Seminole County only.

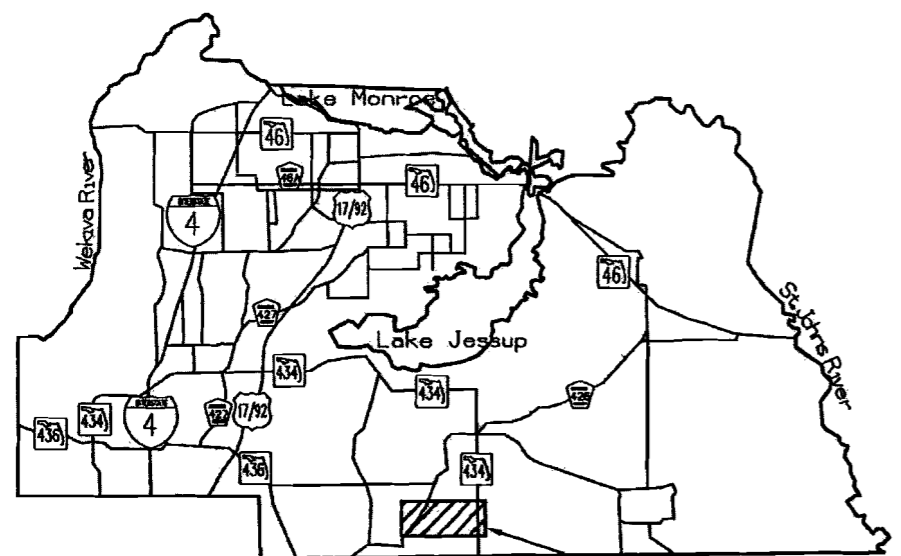
As authorized for execution by the Board of County
Commissioners at its _____, 2008, regular
meeting.

Approved as to form and legal sufficiency.

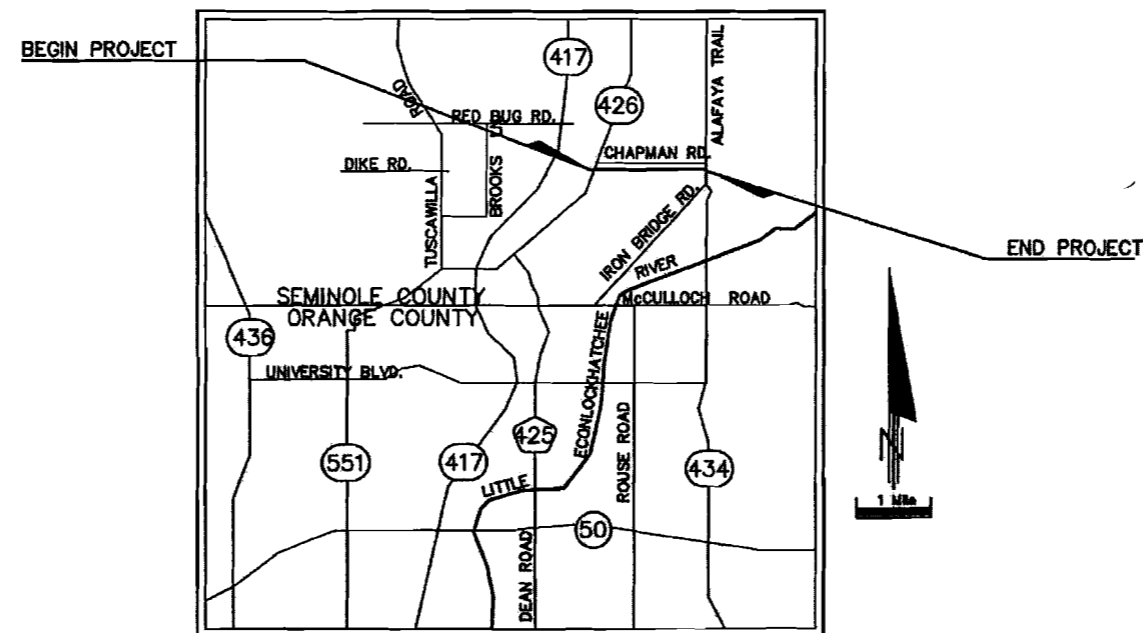
County Attorney

EXHIBIT "A"

\\PROJ\CTS\ENGL\2006\106048 Seminole County\003 Concurser --Lake Joyce- Water Transmission Main - Phase 2\DWG\CURRENT\1-COVER.dwg, 9/5/2007 10:51:47 AM, \\victrol:-trw\REFRO



LOCATION OF PROJECT
SEC. 27, 28, 29
TWP. 21S. RGE. 31E



PROJECT LOCATION MAP

PEPTEMBER, 2007

PLANS PREPARED BY :

SEMINOLE COUNTY
BOARD OF COUNTY COMMISSIONERS

Bob Dallari
District 1

Brenda Carey
District 5,

Michael McLean
District 2

Dick Van Der Weide
District 3

Carlton D. Henley
District 4

CIP NUMBER: 0168801

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN CHANGED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

UTILITY PLANS
APPROVED BY: R. KENT VEECH, P.E.
DATE: SEPTEMBER, 2007
P.E. NO.: 54101

ENGINEER'S PROJECT No. 108048.002

M:\PROJECTS\ENR\2006\106048 Seminole County\002 Consumers-Lake Hayes Water Transmission Main - Phase 2\DWG\CURRENT\2-INDEX.dwg, 9/5/2007 10:35:07 AM, \\rockett-usa\REPRO

INDEX OF DRAWINGS

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3	GENERAL NOTES
4	KEY MAP
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UTILITY CONTACTS		
UTILITY	COMPANY	TELEPHONE
ELECTRIC	PROGRESS ENERGY	(407) 772-5305
	FLORIDA POWER & LIGHT COMPANY	(305) 442-5988, 1 800 432 4770
	FPC-PROGRESS ENERGY FLORIDA, INC. (DISTRIBUTION)	(407) 359-4418
	FPC-PROGRESS ENERGY FLORIDA, INC. (TRANSMISSION)	(407) 942-9471
WATER/SEWER	ALAFAYA UTILITIES, INC.	(407) 869-8588
	CITY OF ORLANDO-BUREAU OF WASTEWATER	(407) 246-3824
	CITY OF OVIEDO	(407) 971-5659
	SEMINOLE COUNTY ENVIRONMENTAL SERVICES DEPT.	(407) 868-2760
TELEPHONE	BELLSOUTH TELECOMMUNICATIONS	(407) 273-5084
	EMBARQ COMMUNICATIONS INC.	(407) 830-3458
	AT&T	(770) 918-5424
CABLE TV	BRIGHT HOUSE NETWORKS	(407) 832-8809
GAS	FLORIDA PUBLIC UTILITIES-GAS	(386) 868-9319
	TECO-PEOPLES GAS SYSTEM	(407) 426-8809 EXT. 218
TRAFFIC	SEMINOLE COUNTY TRAFFIC ENGINEERING DEPARTMENT	(407) 865-5677
	SUNSHINE STATE ONE CALL OF FLORIDA (SSOCOF)	811
NOTE: THIS LISTING IS PROVIDED AS AN AID TO THE CONTRACTOR. UTILITIES LISTED ARE THOSE WHICH ARE KNOWN TO HAVE FACILITIES WITHIN THE GENERAL LOCATION OF THE PROJECT BUT SHALL NOT BE CONSIDERED ALL INCLUSIVE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY AND ARRANGE FOR FIELD LOCATION OF ALL FACILITIES THAT ARE ENCOUNTERED DURING CONSTRUCTION.		

LEGEND

WATER VALVE		SPRINKLER HEAD	
SEWER VALVE		SIGNAL CONTROL BOX	
GAS VALVE		TRAFFIC SIGNAL BOX	
WATER VALVE		ELECTRIC RISER	
IRRIGATION CONTROL VALVE		GAS MARKER	
EXIST. SANITARY MANHOLE		PHONE MARKER	
EXIST. UTILITY MANHOLE		PHONE JUNCTION BOX	
EXIST. TELEPHONE MANHOLE		ELECTRIC JUNCTION BOX	
EXIST. M.E.S.		EXIST. ELECTRIC OUTLET	
FIRE HYDRANT		CABLE TV BOX	
CATCH BASIN		CONC. POWER POLE	
CURB INLET		TRANSFORMER	
CURB INLET		PHONE CABINET	
WOOD UTILITY POLE		STEEL SIGN POST	
GUY ANCHOR		CONC. PAD w/STEEL SIGN POST	
TRAFFIC SIGN		PAINT MARK BY UTILITY OWNER	
DRAINAGE MANHOLE		RIGHT OF WAY LINE	
ELECTRIC METER		EASEMENT LINE	
WATER METER		WATER MAIN	
GREASE TRAP		GRAVITY SEWER	
TELEPHONE RISER		GAS MAIN	
STREET LIGHT		FORCE MAIN	
FLOOD LIGHT		EXIST. REUSE WATER MAIN	
CONC. PAD AND POLE w/LIGHT MAST		OVERHEAD UTILITY	
BACKFLOW PREVENTER		UNDERGROUND ELECTRIC	
REDUCER		FIBER OPTIC CABLE	
TEE		EXIST. DRAINAGE PIPE	
CAP		BURIED ELECTRIC LINE	
CHAIN LINK FENCE LINE		CABLE TV LINE	
WOOD FENCE LINE			

TREE SYMBOLS

	PINE TREE (SIZE AS SHOWN)
	OAK TREE (SIZE AS SHOWN)
	PALM TREE (SIZE AS SHOWN)
	SAGO TREE (SIZE AS SHOWN)

SURVEY SYMBOLS

	FOUND NAIL & DISC
	TRAVERSE POINT SET NAIL & DISC LB#3481

ABBREVIATIONS

APPR'D	APPROVED	OHW	OVERHEAD WRES
BLVD.	BOULEVARD	PQ.	PAGE
CONC.	CONCRETE	PLS	PROFESSIONAL LICENSED SURVEYOR
ELEV.	ELEVATION	PSM	PROFESSIONAL SURVEYOR & MAPPER
FB.	FIELD BOOK	PVC	POLY VINYL CHLORIDE PIPE
FM	FORCE MAIN	RCP	REINFORCED CONCRETE PIPE
INV	INVERT	R/W	RIGHT-OF-WAY
IRC	IRON ROD & CAP	TBM	TEMPORARY BENCH MARK
IP	IRON PIPE	W/	WITH
LB	LICENSED BUSINESS	&	AND
NO.	NUMBER	TV	TELEVISION
N:	NORTHING	MON.	MONUMENT
E:	EASTING	(C)	CALCULATED
ASP	ASPHALT	(D)	DEED
STA:	STATION	(F)	FIELD
P.B.	PLAT BOOK	(P)	PLAT
IR	IRON ROD	L	LEFT
FND.	FOUND	R	RIGHT
DIP	DUCTILE IRON PIPE		

DESIGNED	VJB	APPROVED:	
DRAWN	VJB	DATE:	
CHECKED	VJB	R. Kent Veech, P.E. FLA. NO. 54101	
	KENT VEECH	CIVIL DISCIPLINE	
NO.	DATE	REVISION	BY APPR'D PROJECT MANAGER



CONSUMER / LAKE HAYES
WATER TRANSMISSION MAIN - PHASE II
SEMINOLE COUNTY ENVIRONMENTAL SERVICES DEPARTMENT

DRAWING INDEX, LEGEND,
ABBREVIATIONS AND UTILITY CONTACTS

DATE	9-4-07	PROJECT NO.	106048.002
SCALE	NONE	SHEET NO.	2
OF			

SUB: 9028 DRAFTER DATE PROJ. DESIGN DATE SUR. MAN DATE REVW DATE PROJ. MAN DATE QC DATE BACKCHECK DATE

W:\PROJECTS\ENG\2005\105046 Seminole County\002 Consumers-Lake Hayes-Water Transmission Main - Phase 2\DWG-CURRENT\3-NOTES.dwg, 9/5/2007 10:30:36 AM, \\rockett-sv\REP00

GENERAL NOTES:

- 1. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO THE PREPARATION OF THE BID TO BECOME FAMILIAR WITH THE NATURE AND EXTENT OF THE WORK AND LOCAL CONDITIONS (EITHER SURFACE OR SUBSURFACE) WHICH MAY AFFECT THE WORK TO BE PERFORMED, AND THE EQUIPMENT, LABOR AND MATERIALS REQUIRED. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR COMPLETE PERFORMANCE UNDER CONTRACT.
- 2. ALL AREAS WHERE LANDSCAPING OR SOO HAS BEEN REMOVED OR DISTURBED BY CONTRACTOR'S OPERATIONS SHALL BE LANDSCAPED OR RESOODED TO RESTORE TO ORIGINAL OR BETTER CONDITION.
- 3. ALL PUBLIC AND PRIVATE PROPERTY DISTURBED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THE CONDITION EXISTING BEFORE COMMENCING CONSTRUCTION WORK.
- 4. INLETS AND CATCH BASINS SHALL BE PROTECTED FROM SEDIMENT UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS. EROSION CONTROL AT ALL INLET DRAINAGE STRUCTURES DURING CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH FOOT INDEX NO. 102.
- 5. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF ALL NEWLY PLANTED GRASS OR VEGETATION UNTIL THE PROJECT HAS BEEN ACCEPTED BY THE COUNTY AND FINAL PAYMENT ISSUED.
- 6. THE CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS AT ALL INTERSECTIONS OF PROPOSED WORK AND EXISTING UTILITIES. THE EXPLORATORY EXCAVATION SHALL BE MADE 48 HOURS OR 1,000 FEET IN ADVANCE OF THE WORK, WHICHEVER IS GREATER. IF THERE IS A CONFLICT, THE CONTRACTOR IS TO NOTIFY THE ENGINEER IMMEDIATELY. INFORMATION ON THE OBSTRUCTION TO BE FURNISHED BY THE CONTRACTOR SHALL INCLUDE LOCATION, ELEVATION, UTILITY TYPE, MATERIAL AND SIZE.
- 7. CONTRACTOR SHALL NOT ENCR OACH ONTO PRIVATE RESIDENTIAL PROPERTY AND SHALL MAINTAIN CONSTRUCTION WITHIN THE RIGHT-OF-WAY AND UTILITY EASEMENTS.
- 8. ALL EXCAVATIONS SHALL CONFORM TO THE REQUIREMENTS OF THE TRENCH SAFETY ACT. EXCESS EARTHWORK MATERIALS SHALL BE THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF PROPERLY.
- 9. CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY SUPPORT OF UTILITY POLES AND COORDINATION OF SUCH WITH UTILITY OWNERS.
- 10. WHEN REFILLING EXCAVATED TRENCHES/PITS IN UNPAVED AREAS, THE CONTRACTOR SHALL ENDEAVOR TO REPLACE THE SOIL SO THAT THE ORIGINAL ORGANIC SURFACE IS RESTORED AS MUCH AS POSSIBLE. WHERE IT IS NOT POSSIBLE TO REPLACE THE ORGANIC SURFACE, THE CONTRACTOR WILL ENSURE THE RESTORED SURFACE SOIL DOES NOT HAVE A HIGH PERCENTAGE OF FINE MATERIALS (SILT OR COLLOIDAL CLAY).
- 11. CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES TO HAVE ALL UTILITIES FIELD LOCATED PRIOR TO CONSTRUCTION. UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND ARE BASED ON BEST AVAILABLE INFORMATION.
- 12. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF REPAIRING ANY DAMAGE TO UTILITIES CAUSED BY THE WORK.
- 13. UNDER NO CIRCUMSTANCES SHALL THE ACTIVITIES OF THE CONTRACTOR CAUSE ANY INTERRUPTIONS TO THE SERVICE OPERATION OF EXISTING UTILITIES WITHOUT WRITTEN AUTHORIZATION FROM THE UTILITY OWNER. IN CASE OF ANY ACCIDENTAL INTERRUPTION OF WATER, SEWER AND POWER SERVICES TO THE RESIDENCES, THE CONTRACTOR SHALL HAVE THESE SERVICES RESTORED WITHIN 4 HOURS. IN CASE OF ANY ACCIDENTAL INTERRUPTION OF CABLE AND PHONE TO THE RESIDENCES, THE CONTRACTOR SHALL HAVE THESE SERVICES RESTORED WITHIN 24 HOURS.
- 14. TEMPORARY AIR RELEASE STATIONS SHALL BE INCLUDED AS NECESSARY TO ALLOW ALL ENTRAPPED AIR TO BE REMOVED FROM THE LINES DURING FILLING AND PRIOR TO PRESSURE/LEAKAGE TESTING.
- 15. ALL PIPES SHALL BE PRESSURE TESTED AND LEAK TESTED IN ACCORDANCE WITH ANWA STANDARD C-600, C-605 AND THE SPECIFICATION SECTION 01 91 00.
- 16. UTILITY SEPARATION: SEPARATION REQUIREMENTS BETWEEN POTABLE WATER MAINS AND ANY TYPE OF REUSE MAINS IS 3 FEET HORIZONTAL (OUTSIDE OF PIPE TO OUTSIDE OF PIPE) AND 12 INCHES VERTICAL CLEARANCE, WITH MITIGATION ALLOWED WHEN APPROVED IN ADVANCE BY THE COUNTY.
- 17. ALL PIPING SHALL BE RESTRAINED IN ACCORDANCE WITH THE RESTRAINED JOINT TABLE INCLUDED IN THE DRAWINGS.
- 18. THE CONTRACTOR SHALL RESTORE ALL DISTURBED MATERIALS INCLUDING LANDSCAPING, WATER SERVICES, DRIVEWAYS, SIDEWALKS, MAILBOXES, SHRUBS, STREET SIGNS AND OTHER EXISTING FEATURES. PERSONAL PROPERTY WITHIN THE LIMITS OF CONSTRUCTION SHALL BE RELOCATED BY THE CONTRACTOR AS REQUIRED TO COMPLETE THE WORK. CONTRACTOR SHALL NOTIFY PROPERTY OWNERS OF REMOVAL REQUIREMENT A MINIMUM OF 72 HOURS PRIOR TO COMMENCING REMOVAL. PROPERTY SHALL BE RESTORED IMMEDIATELY UPON COMPLETION OF CONSTRUCTION WITHIN THE AREA.
- 19. WHERE A CONNECTION IS TO BE MADE IN THE FIELD TO AN EXISTING PIPE, THE CONTRACTOR SHALL EXCAVATE IN THE AREA TO VERIFY THE TYPE OF PIPE AND THE PIPE SIZE, AND OBTAIN THE COUNTY'S APPROVAL OF THE PROPOSED METHOD OF CONNECTION PRIOR TO ORDERING AND INSTALLING MATERIALS.
- 20. CONTRACTOR TO SUBMIT A MAINTENANCE OF TRAFFIC PLAN TO THE COUNTY FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION. CONSTRUCTION SHALL NOT BEGIN WITHOUT AN APPROVED MAINTENANCE OF TRAFFIC PLAN.
- 21. WHERE FITTINGS AS SHOWN ON THE DRAWINGS ARE UNAVAILABLE OR REQUIRE LONG LEAD TIMES, CONTRACTOR MAY SUBSTITUTE A COMBINATION OF FITTINGS TO MAINTAIN THE INTENT OF THE DRAWINGS. ANY SUBSTITUTIONS REQUIRE THE APPROVAL OF THE ENGINEER AND THE COUNTY.
- 22. CONTRACTOR TO MODIFY POTABLE WATER SERVICES TO ADD A BACKFLOW PREVENTION DEVICE AND RECONNECT TO EXISTING SERVICE (SEE CONSTRUCTION DETAIL SHEETS).

TREE PRESERVATION NOTES:

- 1. CONTRACTOR SHALL NOT IMPACT EXISTING TREES DURING CONSTRUCTION. THE CONTRACTOR SHOULD CONSIDER EVERY PRACTICAL ALTERNATIVE TO AVOID IMPACTING TREES.
- 2. CONTRACTOR SHALL BE COMPLETELY RESPONSIBLE FOR PROPER TREE PROTECTION FOR THE DURATION OF THE PROJECT. ALL TREE PROTECTION SHALL BE APPROVED BY THE COUNTY PRIOR TO THE START OF CONSTRUCTION.
- 3. IF EQUIPMENT MUST BE DRIVEN OR PLACED WITHIN 3 FEET OF ANY TREE, THE TREE MUST BE PADDED. PADDING SHALL BE PLACED AROUND THE TRUNK FROM THE GROUND TO A HEIGHT GREATER THAN THE EQUIPMENT TO BE PARKED OR MOVED. PADDING SHALL CONSIST OF A MINIMUM OF 5 LAYERS (1/8 INCH MINIMUM PER LAYER) OF CORRUGATED CARDBOARD. CARDBOARD SHALL BE SECURED WITH THE WRAPS OR SIMILAR.
- 4. SUCCESSFUL TREE PROTECTION DEPENDS ON QUALITY BARRICADES THAT REMAIN IN PLACE THROUGHOUT THE PROJECT.
 - A. TREE PROTECTION BARRICADES AS SHOWN ON THE PLANS SHALL BE CONSTRUCTED AS FOLLOWS: BARRICADE MATERIAL SHALL BE A MINIMUM OF HEAVY DUTY 4 FOOT TALL, HIGH-VISIBILITY ORANGE UV STABILIZED UTILITY BARRIER FENCING. FENCING SHALL BE HELD IN PLACE WITH 8 FOOT HIGH STEEL FENCE/SIGN POSTS OR 6 FOOT PRESSURE TREATED WOODEN 2X2 POSTS AND PLASTIC OR WIRE TIE-WRAPS. STAKES SHALL BE PLACED A MAXIMUM OF 8 FEET ON CENTER. ALL BARRICADES SHALL BE FULLY ENCLOSED ALLOWING NO ACCESS INSIDE THE BARRICADE.
 - B. ERECT AN 11"x17" WEATHER-PROOF SIGN THAT STATES "TREE PROTECTION AREA DO NOT CROSS". SIGNS SHALL BE PLACED ON THE NORTH AND SOUTH SIDE OF EACH BARRICADE. SIGNS SHALL BE ERECTED ON A MINIMUM OF EVERY 5TH BARRICADE OR EVERY 200 FEET, WHICHEVER IS LESS.
 - C. INSTALL AND MAINTAIN ALL BARRICADES IN A NEAT AND ORDERLY FASHION. FENCING SHALL BE KEPT SQUARE AND TIGHT AND NOT BE ALLOWED TO SAG OR LOOK UNSIGHTLY.
 - D. DEVIATIONS IN BARRICADE PLACEMENTS ARE ALLOWED TO FOLLOW NATURAL OR MAN-MADE CONTOURS (PAVED AREAS, ETC.) PROVIDED THAT BARRICADES ARE MADE TO COVER THE PRESCRIBED SQUARE FOOTAGE AWAY FROM THE DEVIATIONS. BARRICADED AREAS CAN BE MADE LARGER THAN SHOWN ON THE PLAN AND/OR CAN BE GROUPED TOGETHER IF DESIRED. HOWEVER, BE SURE TO LEAVE SUFFICIENT CONSTRUCTION ACCESS SPACE BECAUSE BARRICADES CAN NOT BE MOVED ONCE CONSTRUCTED.
 - E. QUESTIONS REGARDING BARRICADE PLACEMENT SHALL BE ADDRESSED TO THE COUNTY AND THE ENGINEER.

					DESIGNED	VJB				APPROVED:	
					DRAWN	VJB					
					CHECKED	VJB				DATE:	
						KENT VEECH				R. Kent Veech, P.E. FLA. NO. 54101	
NO.	DATE		REVISION	BY	APPR'D	PROJECT MANAGER				CIVIL DISCIPLINE	



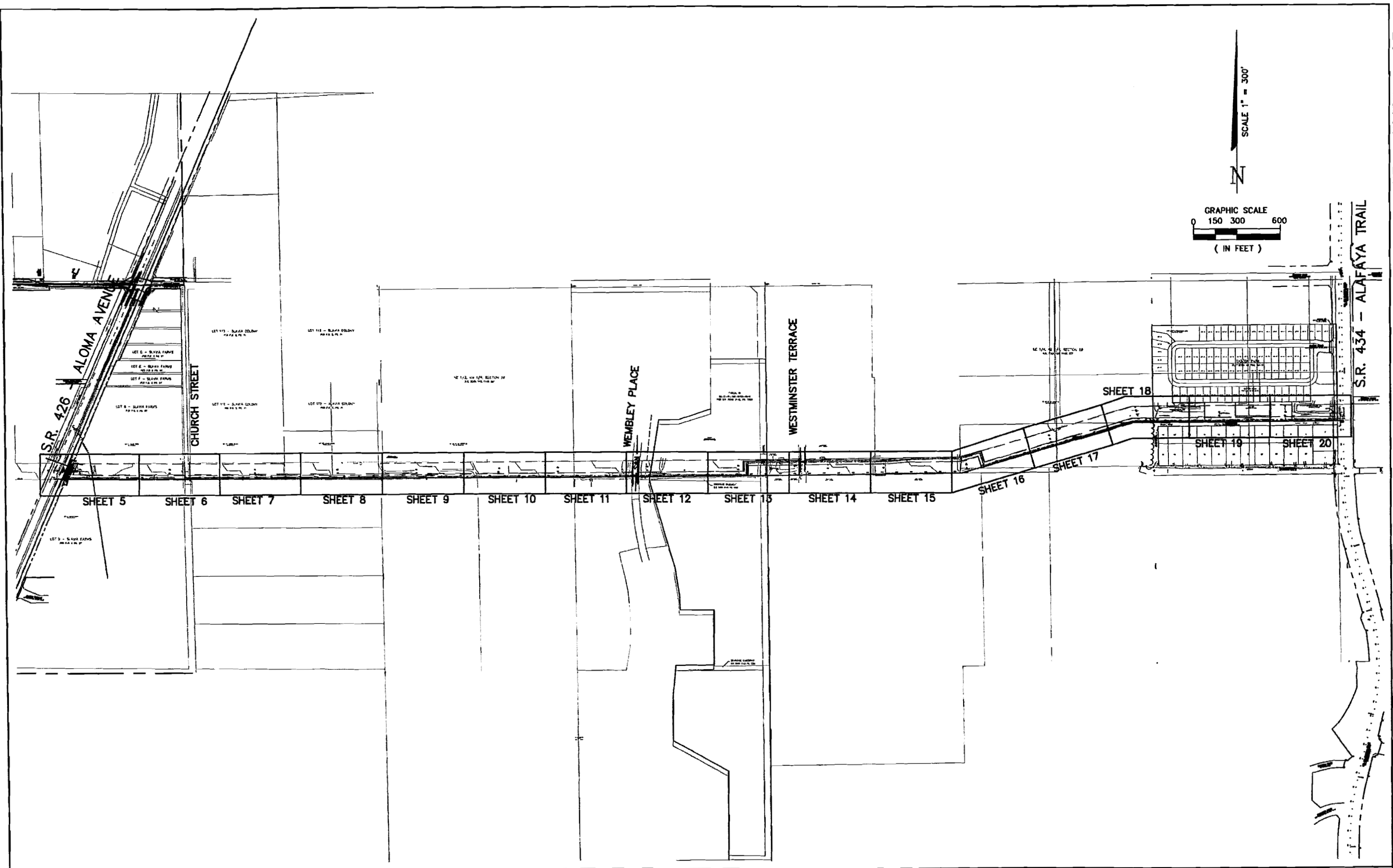
CONSUMER / LAKE HAYES
WATER TRANSMISSION MAIN - PHASE II
SEMINOLE COUNTY ENVIRONMENTAL SERVICES DEPARTMENT


GENERAL NOTES

FILENAME 3-NOTES	DATE 9-4-07	PROJECT NO. 108048.002
SCALE NONE		SHEET NO. 3

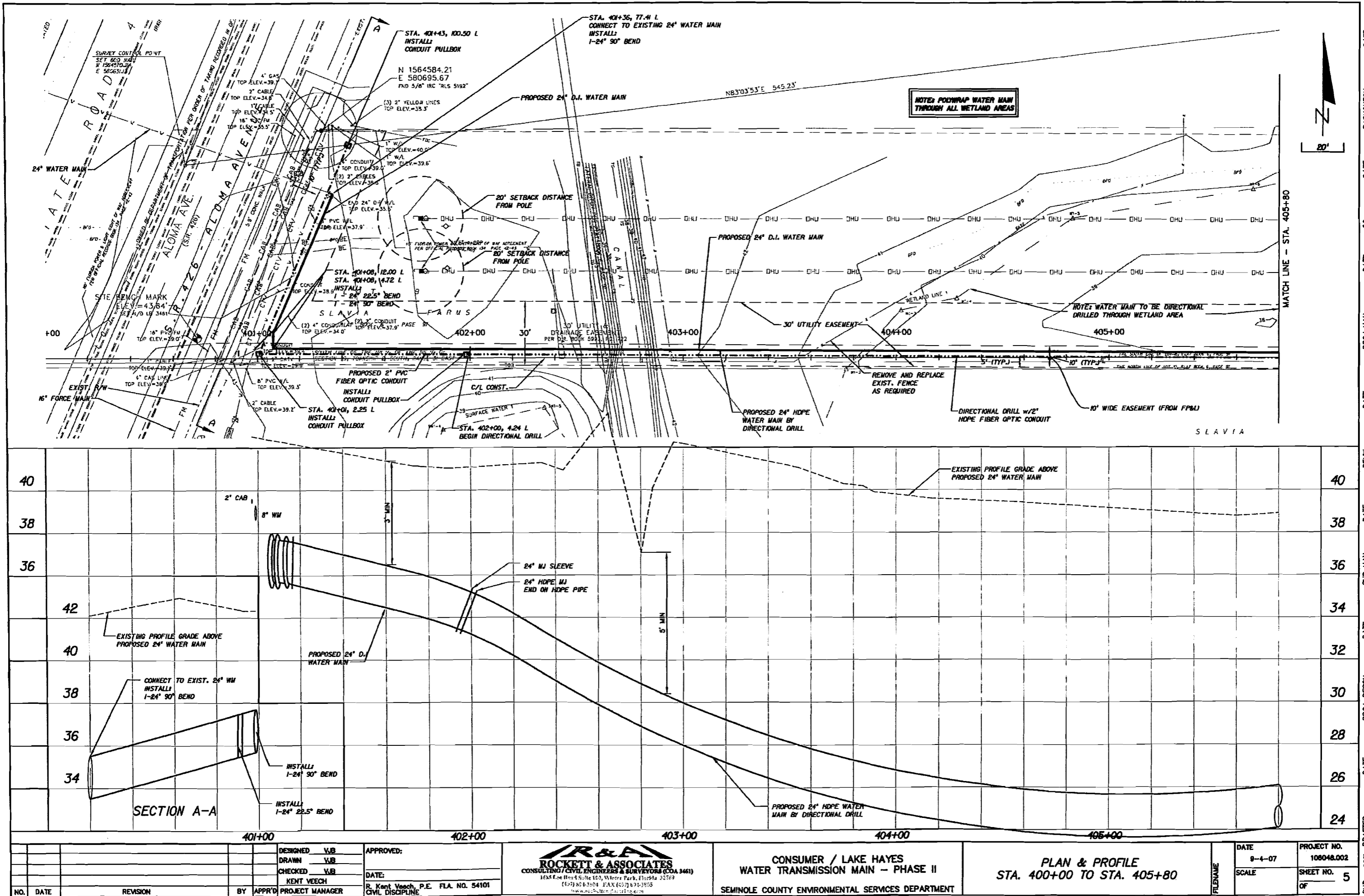
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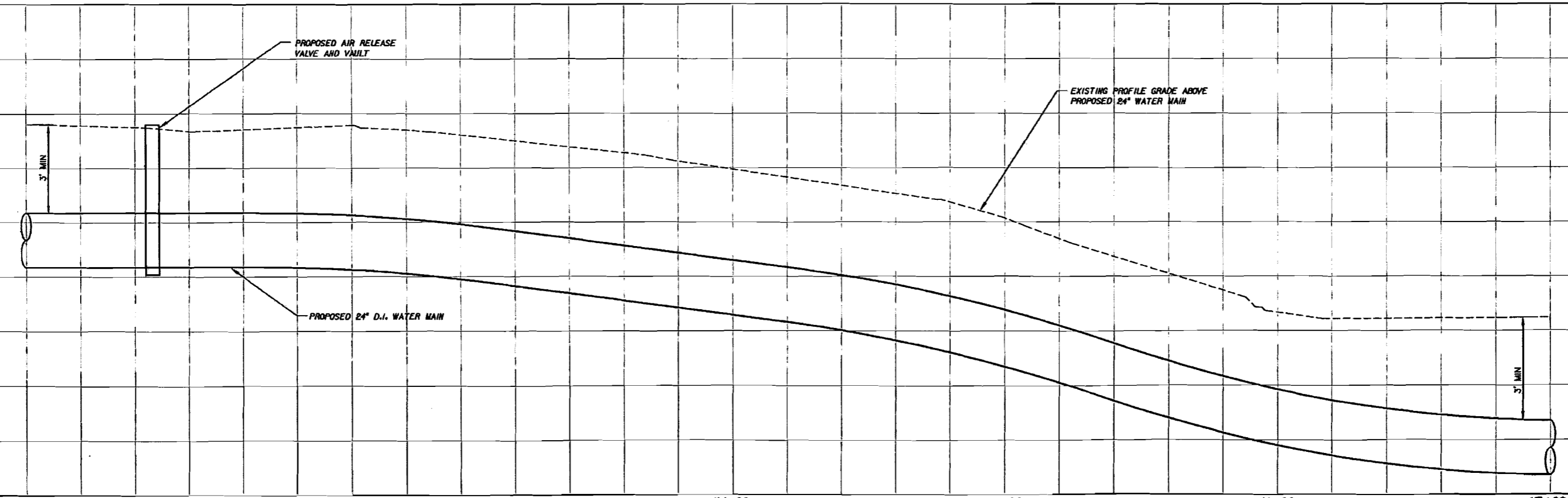
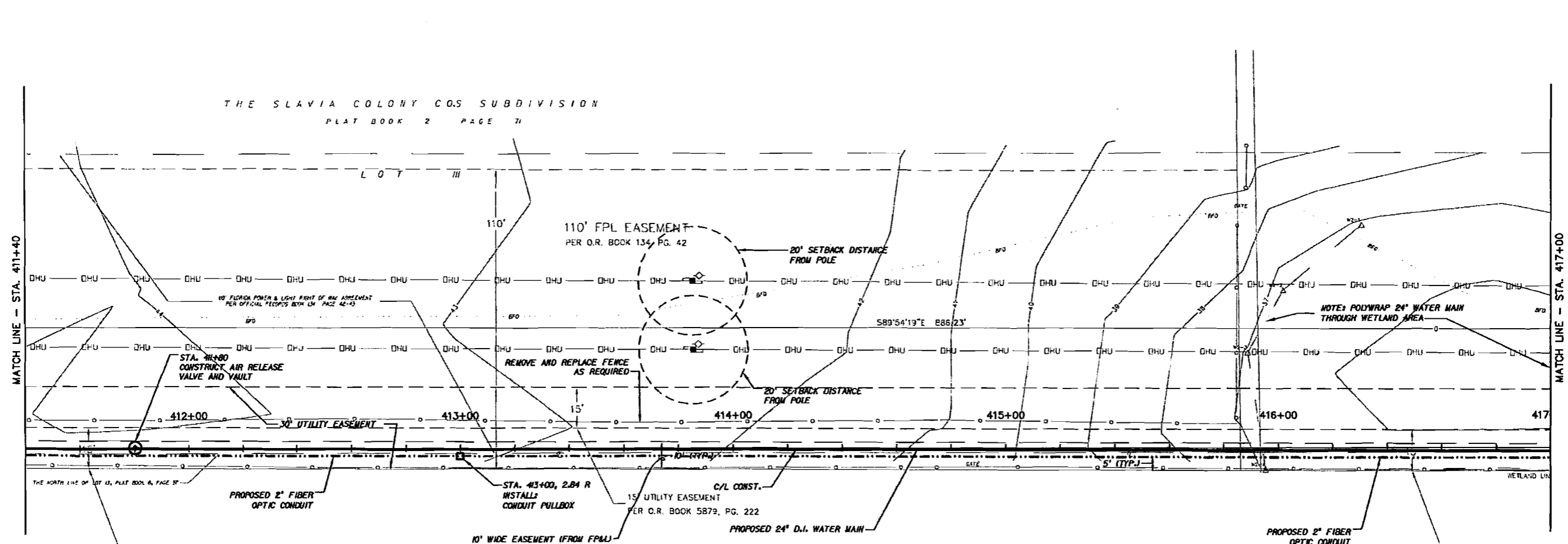
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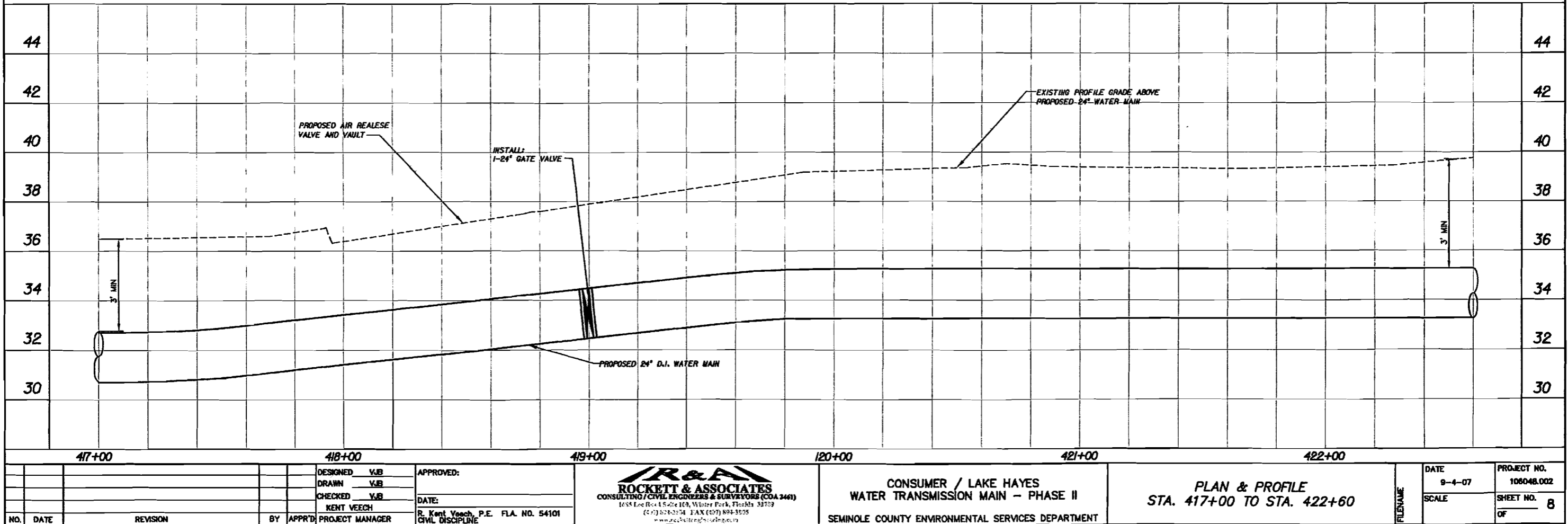
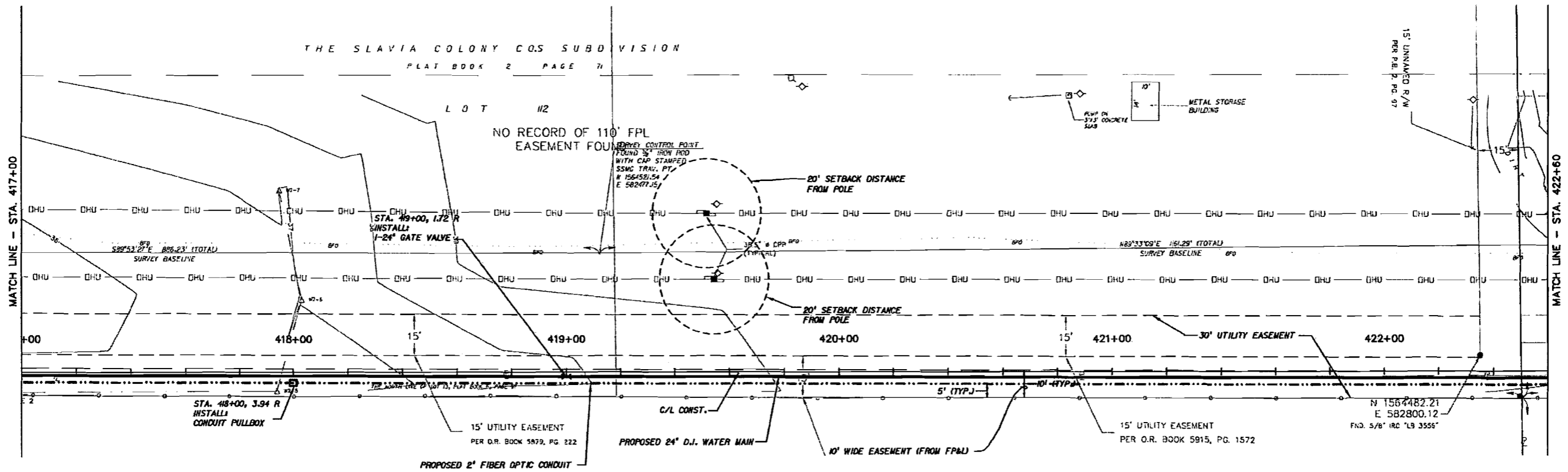
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				KENT VEECH		R. Kent Veech, P.E. FLA. NO. 54101													
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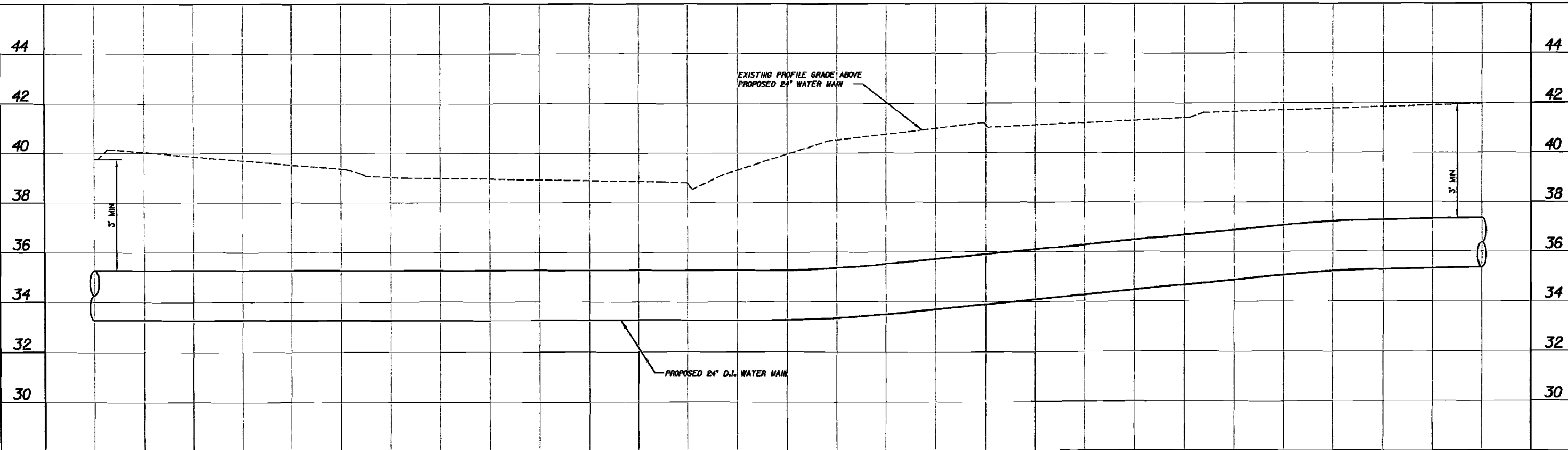
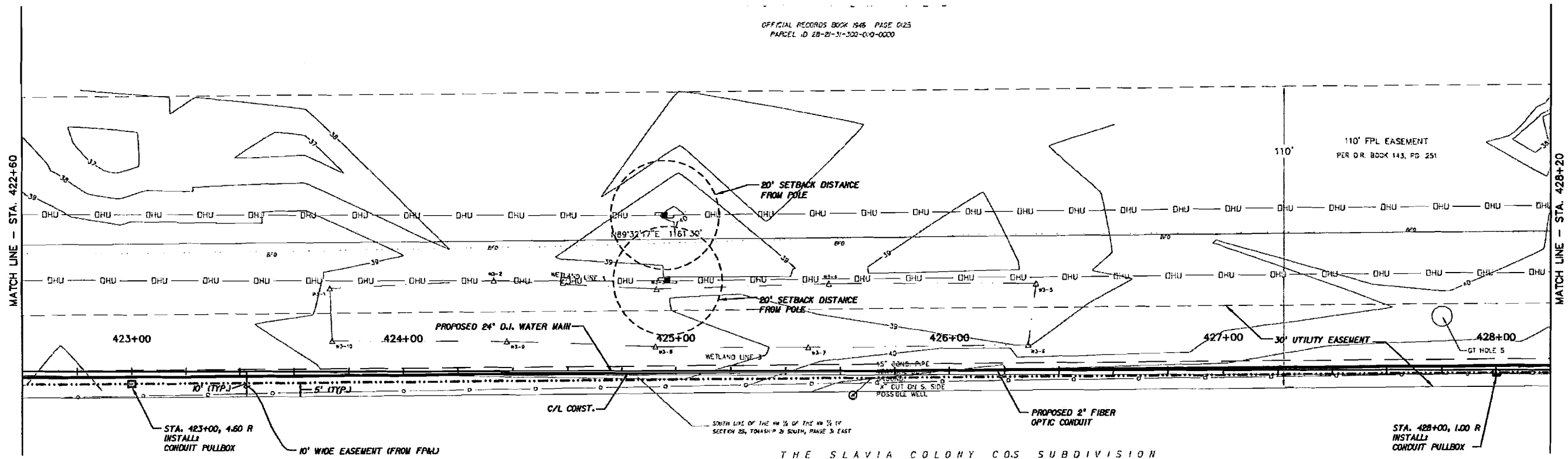


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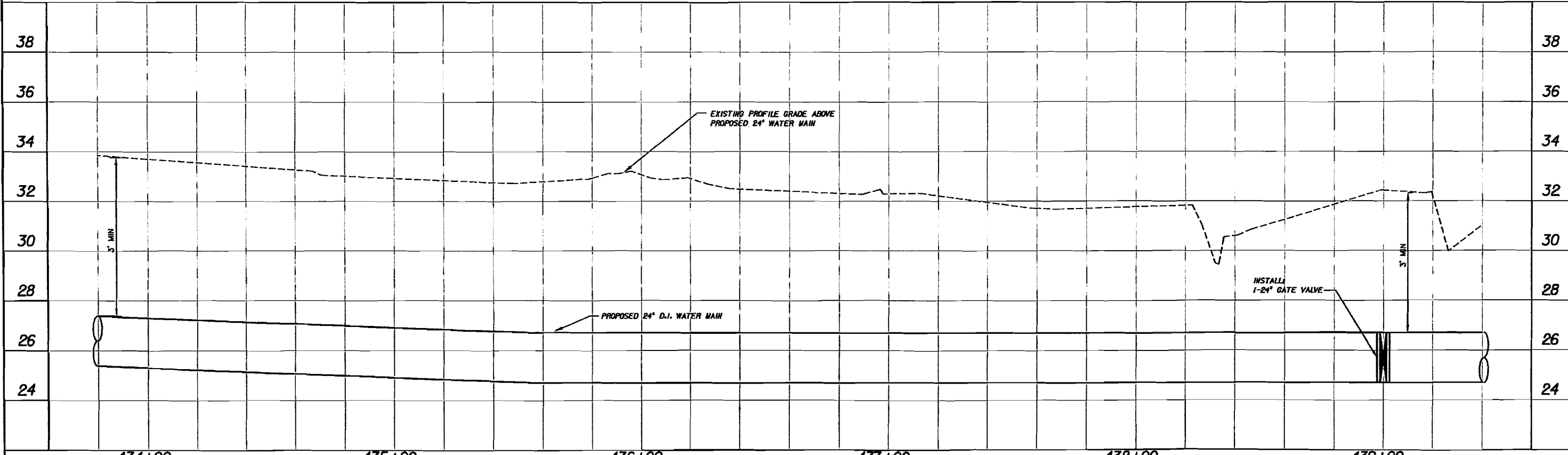
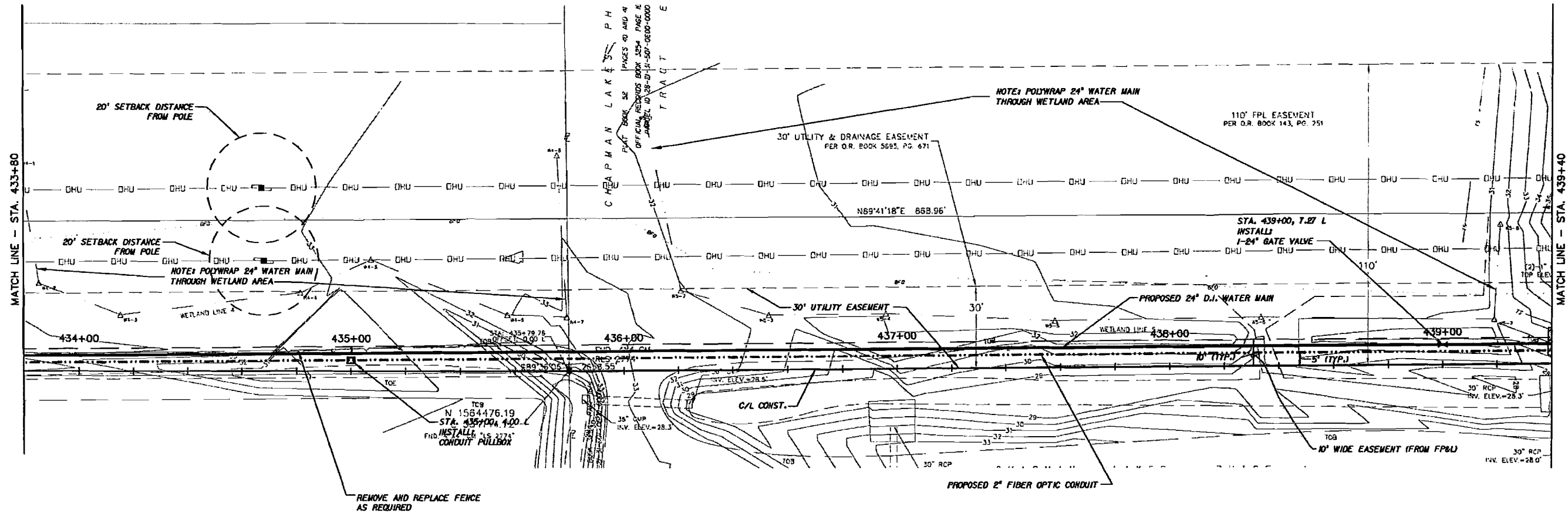
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423+00		424+00		425+00		426+00		427+00		428+00		
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CHECKED	YJB	R. Kent Veech, P.E. FLA. NO. 54101 CIVIL DISCIPLINE										
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BY KENT VEECH		CIVIL DISCIPLINE	
PROJECT MANAGER			

NO.		DATE		REVISION		BY		APPR'D	

ROCKETT & ASSOCIATES
CONSULTING / CIVIL ENGINEERS & SURVEYORS (COA 3461)
1455 E. Red Bank Rd., Winter Park, Florida 32789
(407) 891-3551 FAX (407) 891-5555
WWW.ROCKETT-ASSOCIATES.COM

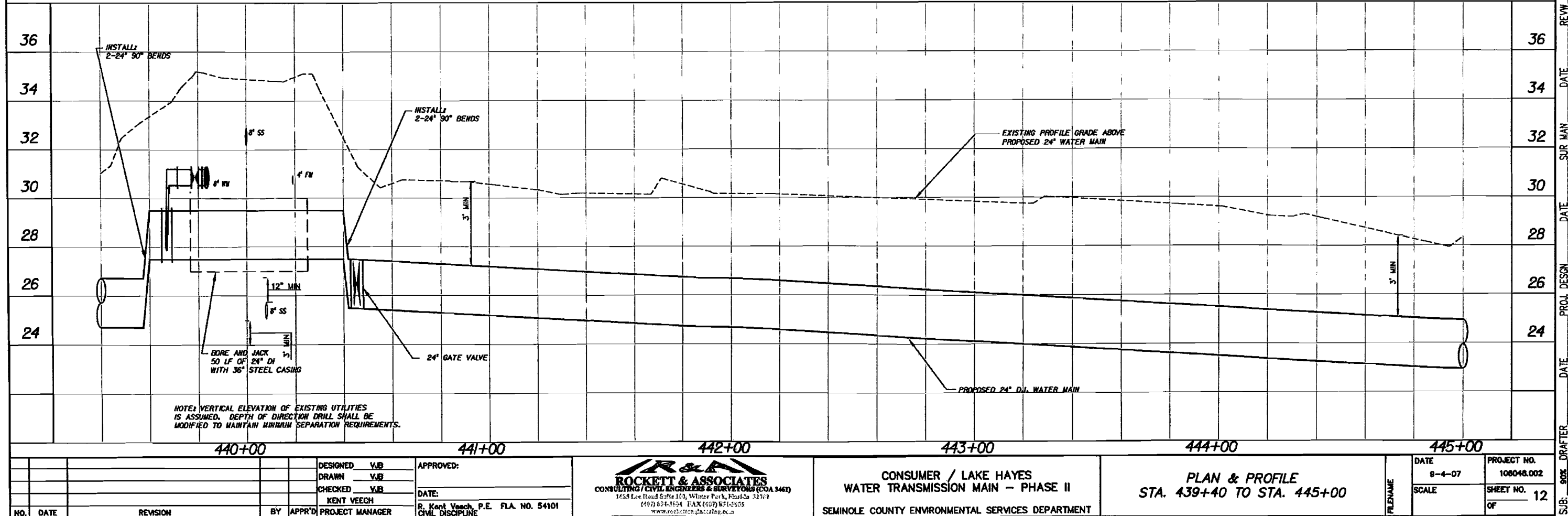
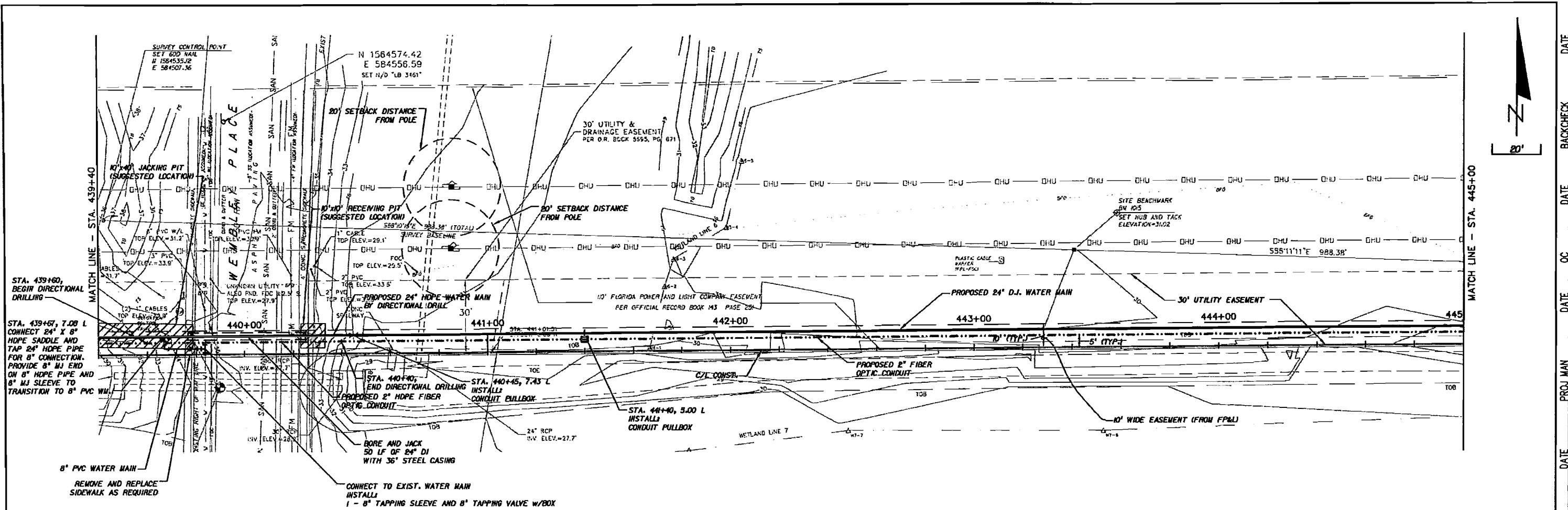
CONSUMER / LAKE HAYES
WATER TRANSMISSION MAIN - PHASE II
SEMINOLE COUNTY ENVIRONMENTAL SERVICES DEPARTMENT

PLAN & PROFILE
STA. 433+80 TO STA. 439+40

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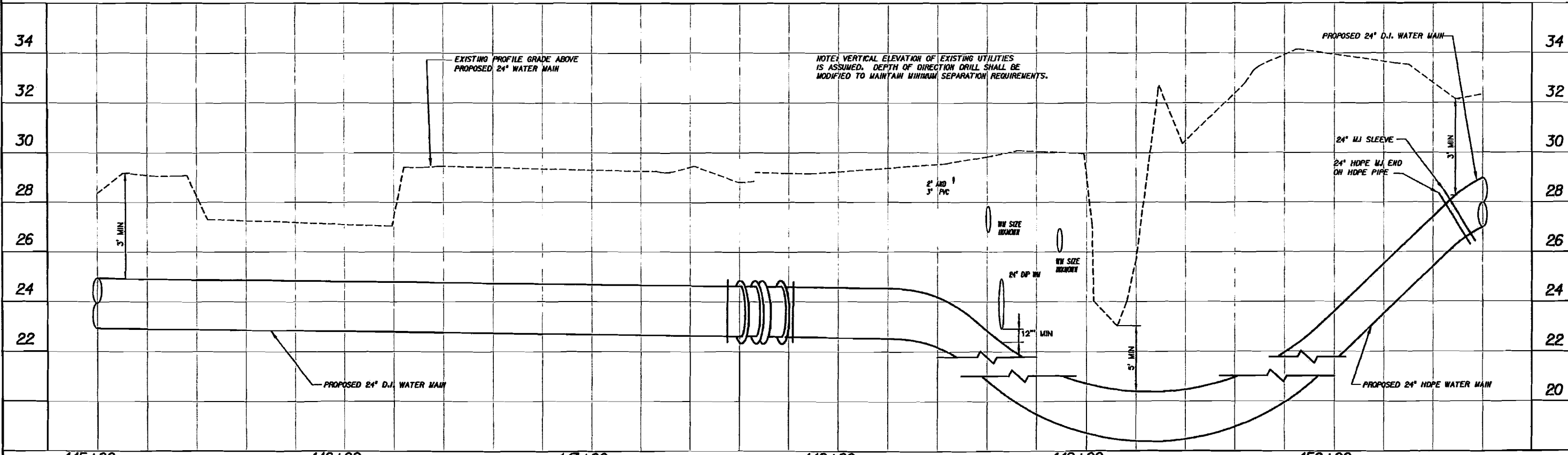
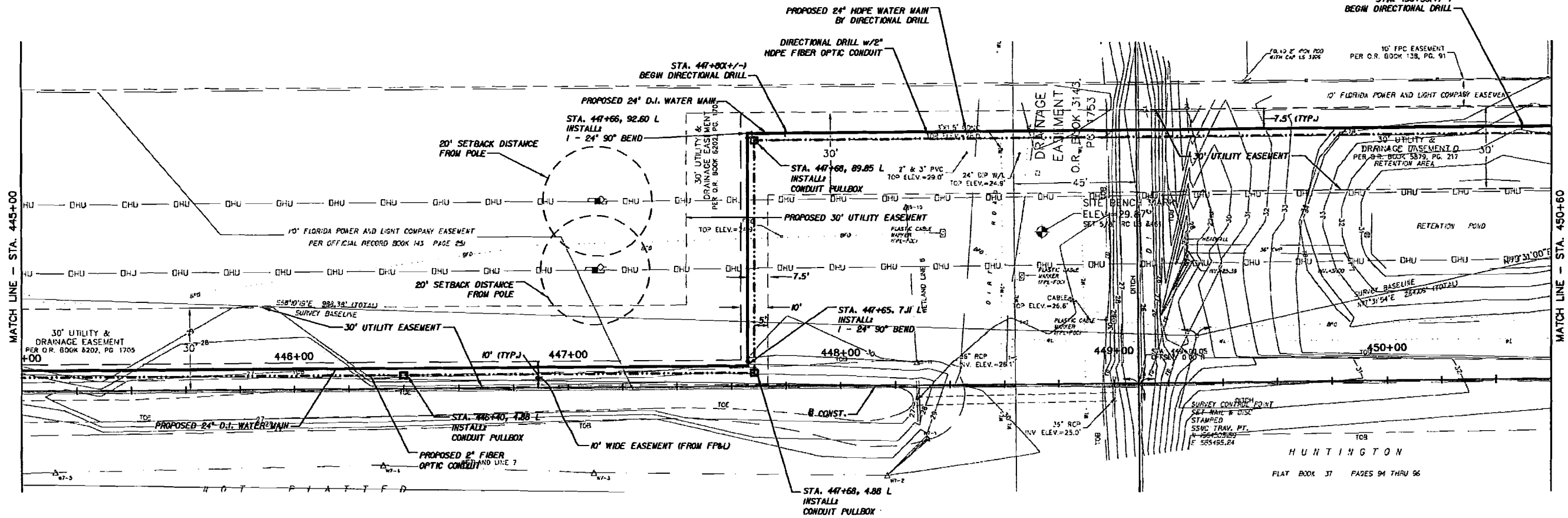
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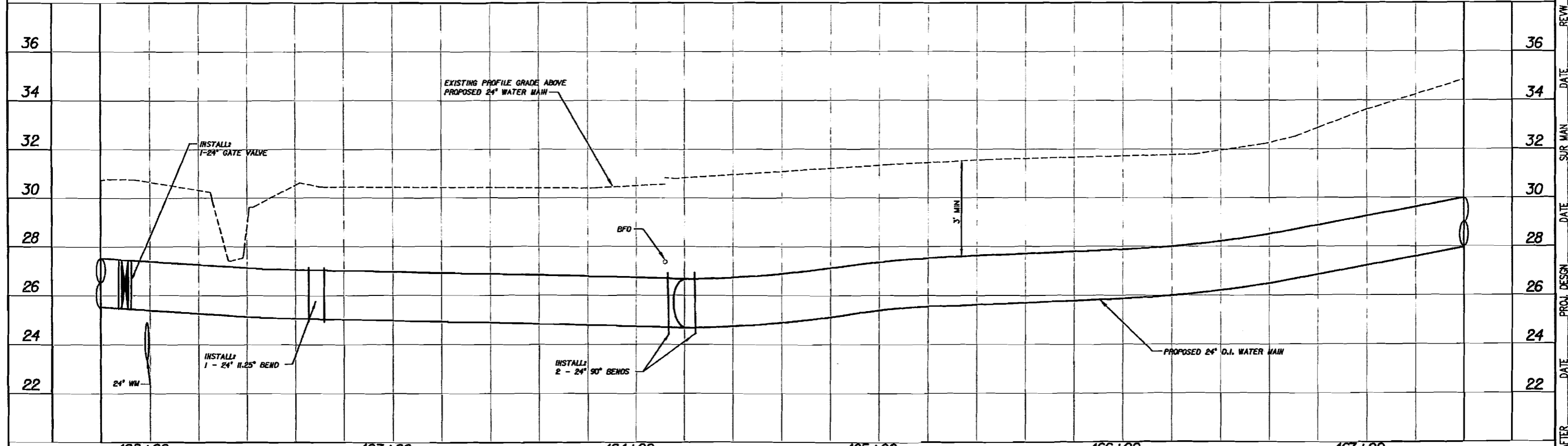
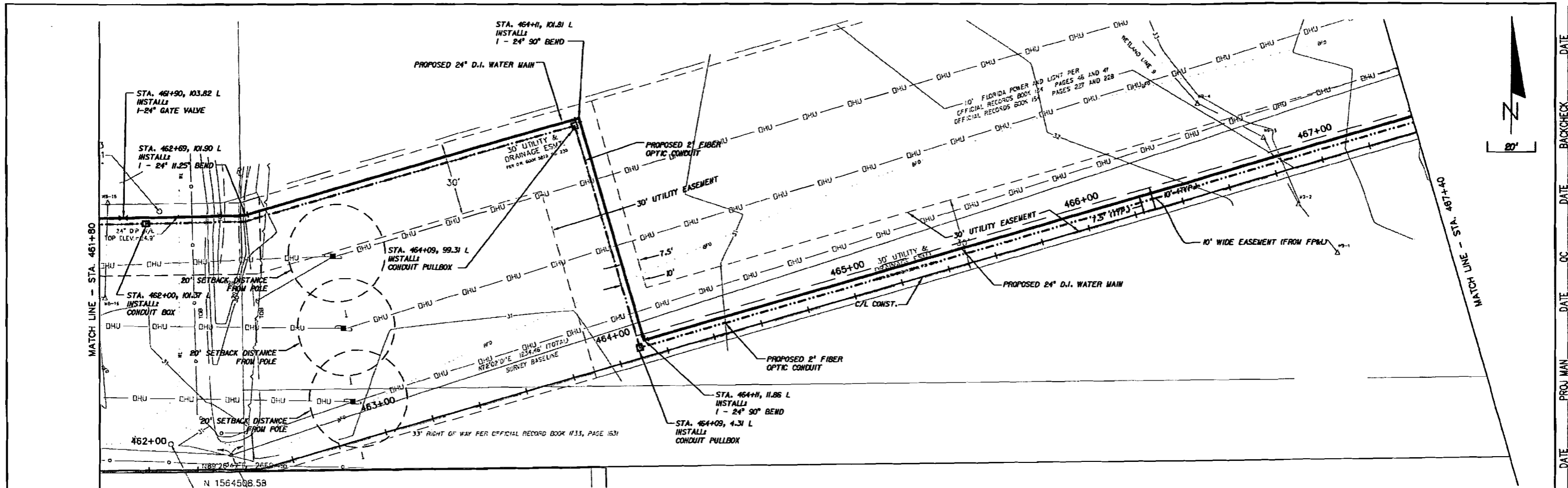
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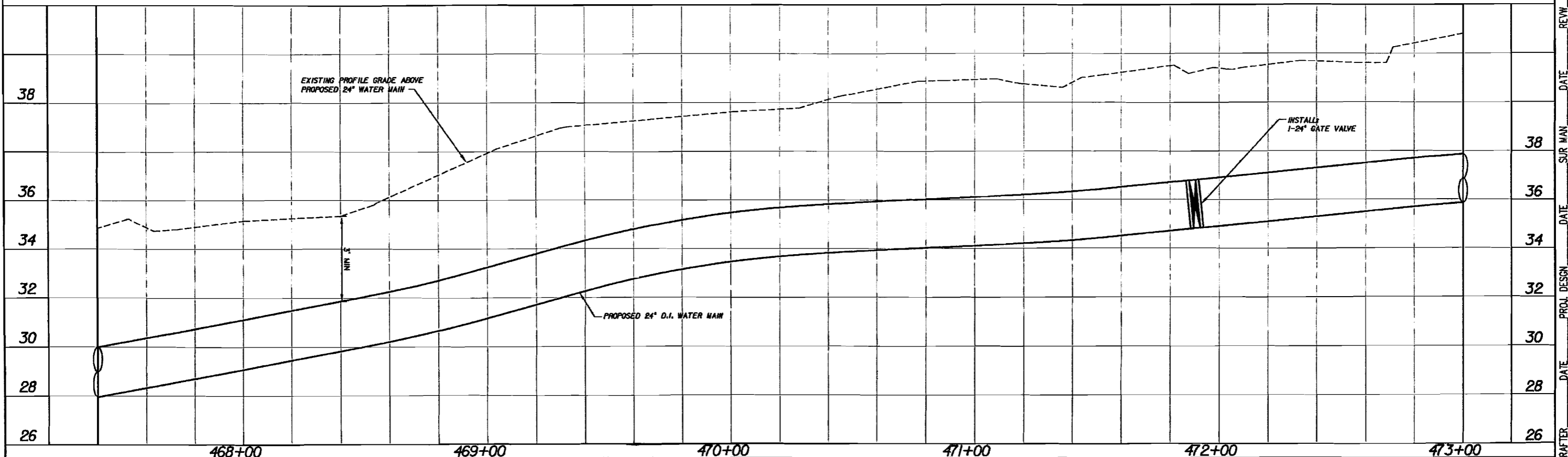
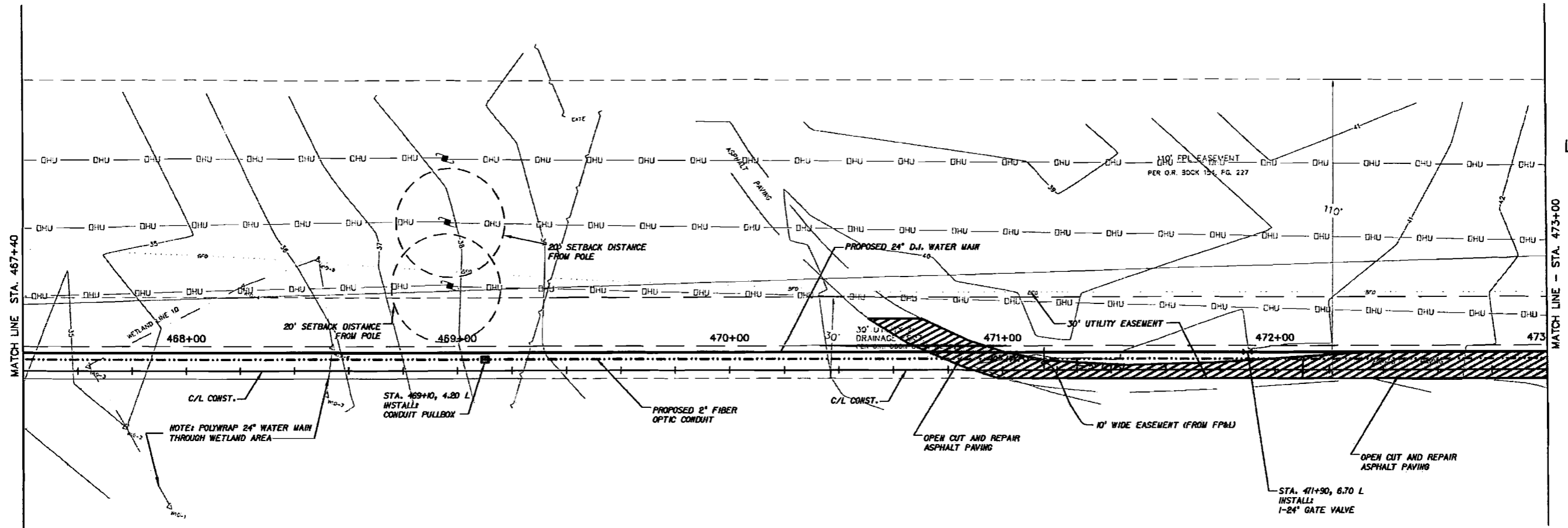
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				KENT VEECH	DATE:												13	
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						CIVIL DISCIPLINE												

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NO.		DATE	REVISION	BY	APPR'D	PROJECT MANAGER	DESIGNED VJB DRAWN VJB CHECKED VJB KENT VEECH	APPROVED: DATE: R. Kent Veech, P.E. FLA. NO. 54101 CIVIL DISCIPLINE	ROCKETT & ASSOCIATES CONSULTING CIVIL ENGINEERS & SURVEYORS (COA 3461) 1684 Lee Road, Suite 100, Winter Park, Florida 32789 (407) 831-3501 FAX (407) 874-3505 www.rockettandassociates.com		CONSUMER / LAKE HAYES WATER TRANSMISSION MAIN - PHASE II SEMINOLE COUNTY ENVIRONMENTAL SERVICES DEPARTMENT		PLAN & PROFILE STA. 461+80 TO STA. 467+40		FILENAME	DATE 9-4-07 SCALE	PROJECT NO. 106048.002 SHEET NO. 16 OF
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KENT VEECH		R. Kent Veech, P.E. FLA. NO. 54101	
PROJECT MANAGER		CIVIL DISCIPLINE	

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1655 Lee Road, Suite 100, Winter Park, Florida 32789	
(407) 574-1324 FAX (407) 574-1325	
www.rockettsurveying.com	

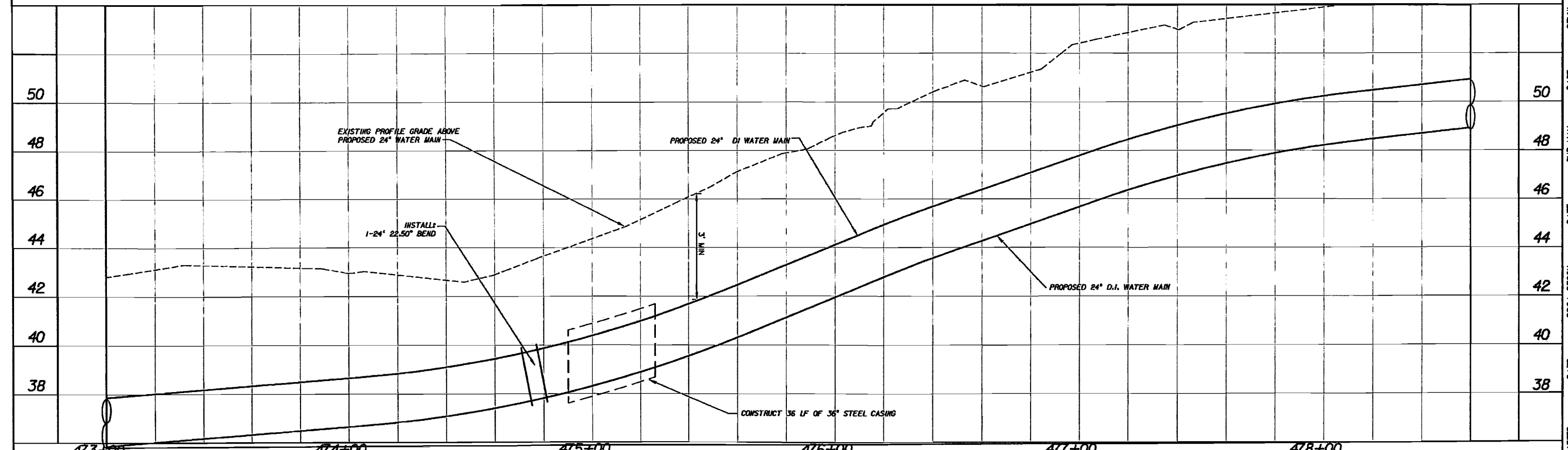
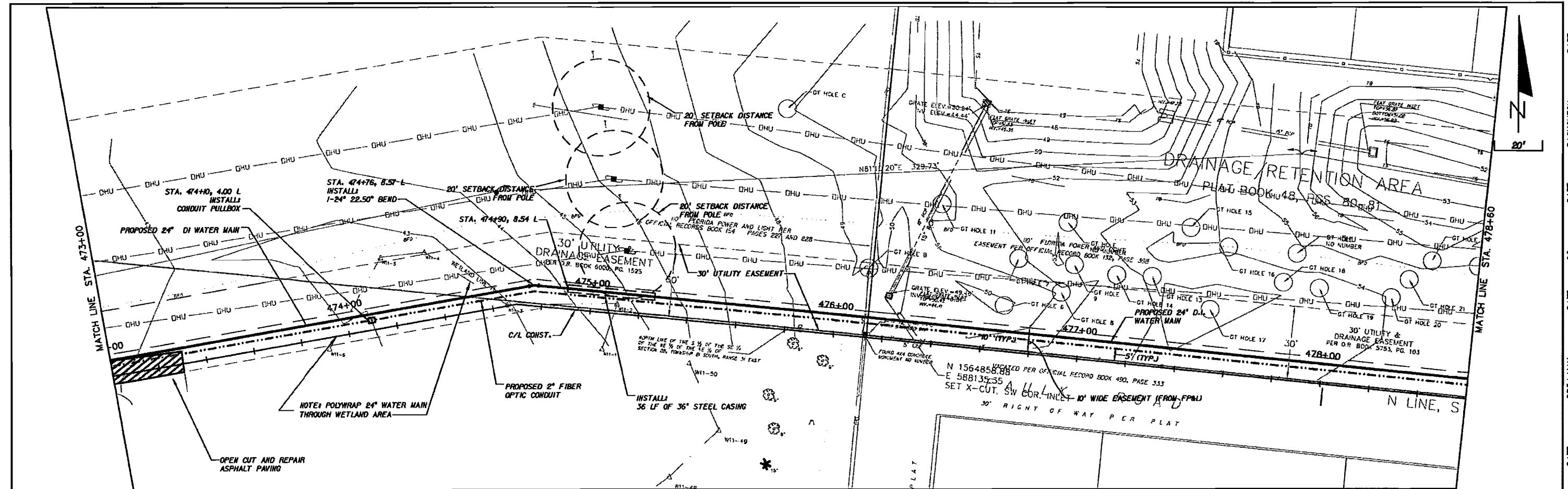
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WATER TRANSMISSION MAIN - PHASE II	
SEMINOLE COUNTY ENVIRONMENTAL SERVICES DEPARTMENT	

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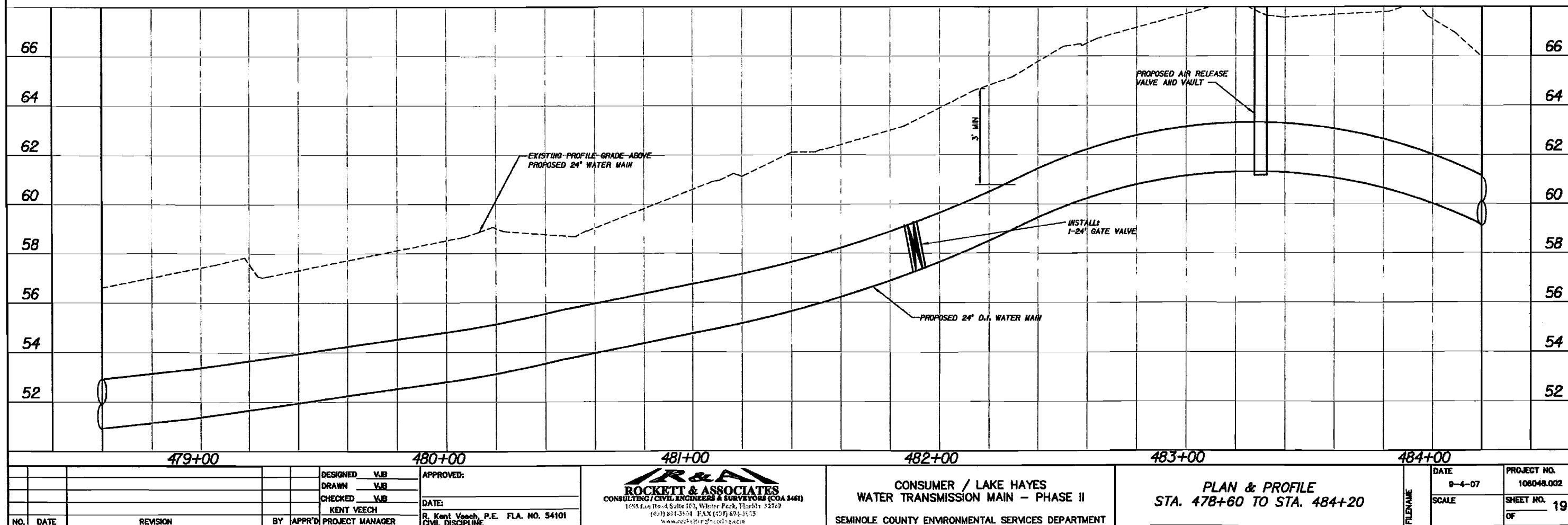
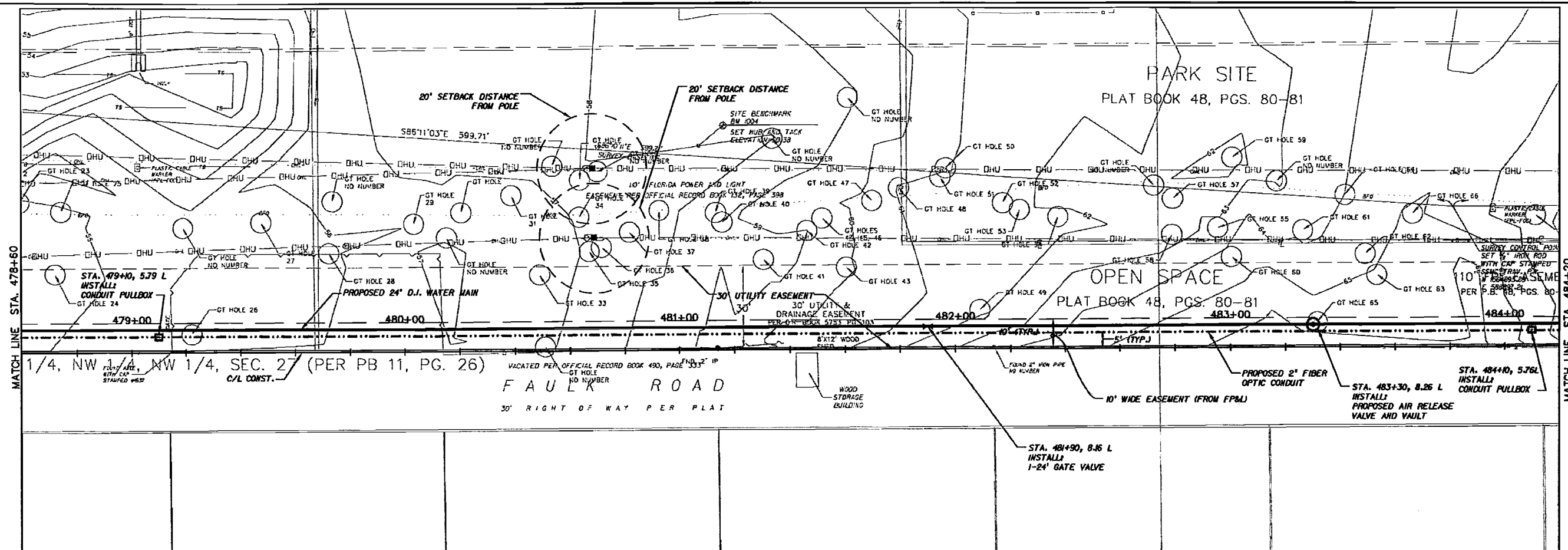
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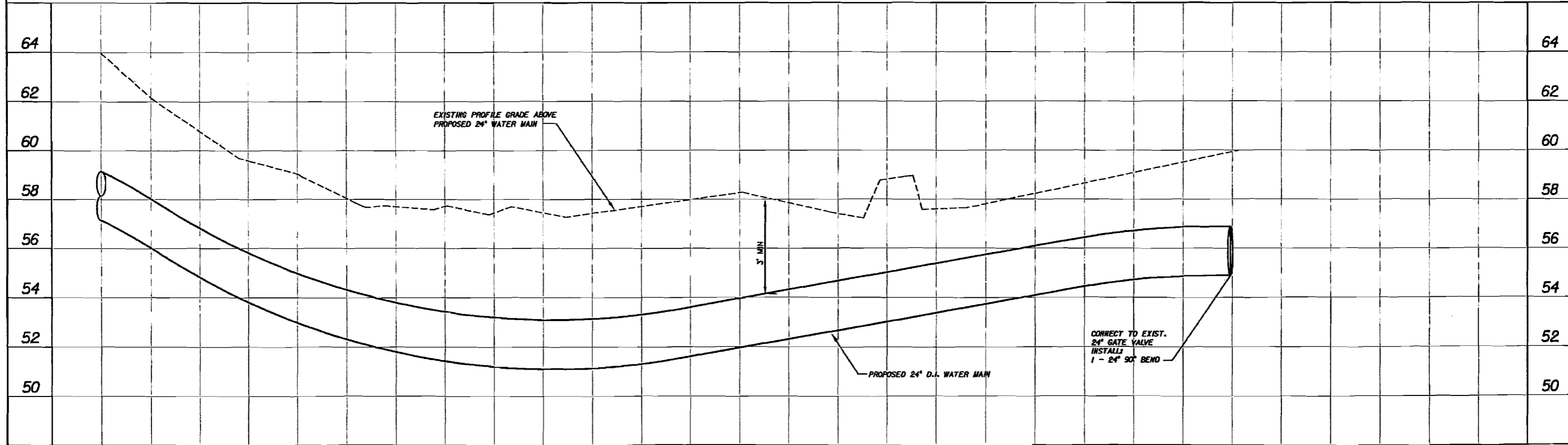
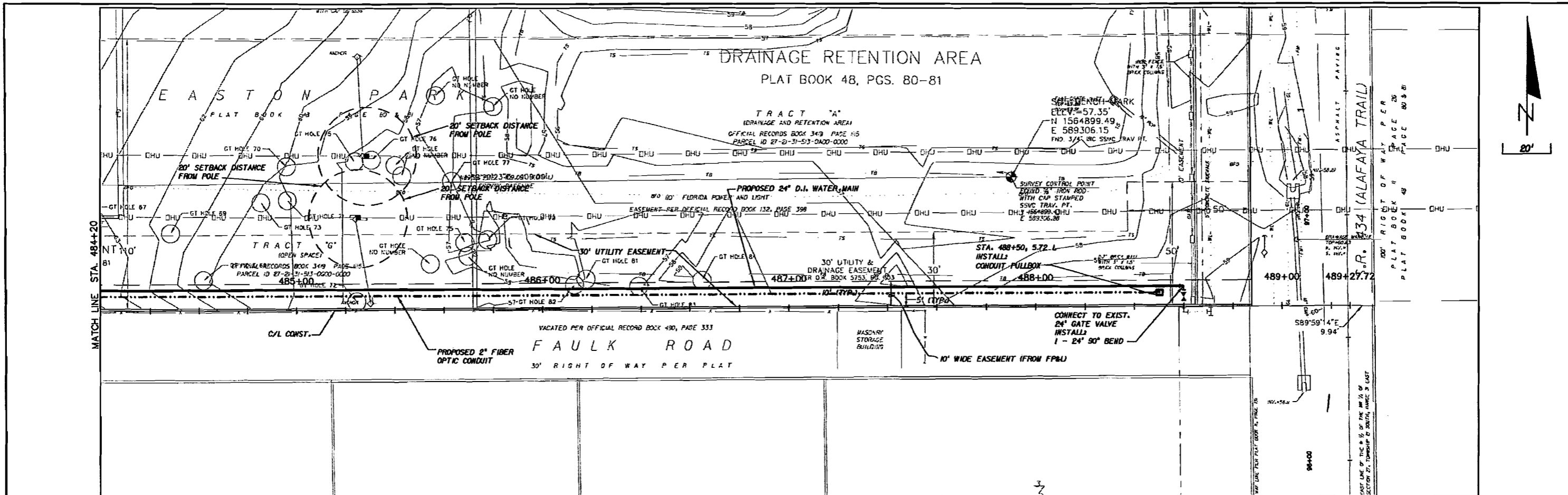


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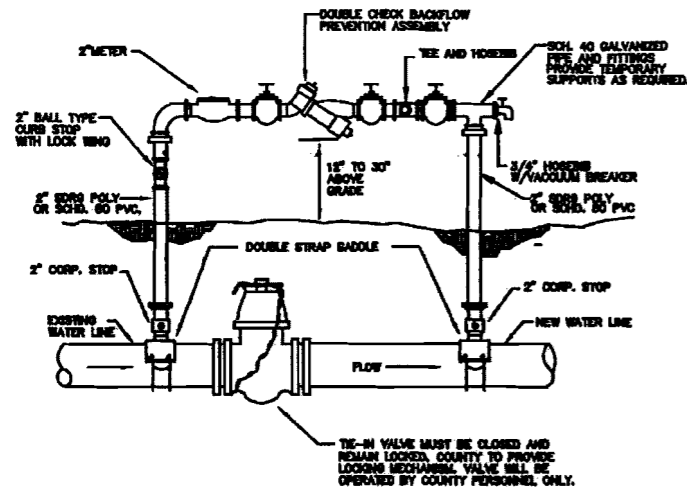
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<div><div>ROCKETT & ASSOCIATES CONSULTING / CIVIL ENGINEERS & SURVEYORS (COA 3441) 1655 Lee Road, Suite 103, Winter Park, Florida 32789 (407) 631-3894 FAX (407) 631-5548 www.rockettandassociates.com</div><div>CONSUMER / LAKE HAYES WATER TRANSMISSION MAIN - PHASE II SEMINOLE COUNTY ENVIRONMENTAL SERVICES DEPARTMENT</div><div>PLAN & PROFILE STA. 484+20 TO STA. 489+27.79</div></div>														
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NOTES:

1. A TEMPORARY JUMPER CONNECTION IS REQUIRED AT ALL CONNECTIONS BETWEEN EXISTING ACTIVE WATER MAINS AND PROPOSED NEW WATER MAIN IMPROVEMENTS.
2. THE DETAIL ABOVE IS TO BE USED FOR FILLING ANY NEW WATER MAIN OF ANY SIZE FROM EXISTING ACTIVE WATER MAINS AND FOR FLUSHING OF NEW MAINS UP TO 8" DIAMETER (2.5 FPS MINIMUM VELOCITY) AND FOR FILLING BACTERIOLOGICAL SAMPLES FROM ANY NEW WATER MAIN OF ANY SIZE. THE JUMPER CONNECTION SHALL BE MAINTAINED UNTIL AFTER FILLING, FLUSHING, TESTING, AND DISINFECTION OF THE NEW MAIN HAS BEEN SUCCESSFULLY COMPLETED AND CLEARANCE FOR USE FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION & OTHER PERTINENT AGENCIES HAS BEEN RECEIVED BY SEM. CO. UTILITIES. THIS JUMPER CONNECTION SHALL ALSO BE USED TO MAINTAIN A MINIMUM PRESSURE OF 20 PSI IN THE NEW MAINS ALL THE TIME AFTER DISINFECTION AND UNTIL THE PDEP CLEARANCE LETTER IS OBTAINED. ADEQUATE THRUST BLOCKING AND JOINT RESTRAINTS SHALL BE PROVIDED TEMPORARILY, AS REQUIRED. PIPE AND FITTINGS USED FOR CONNECTING THE NEW PIPE TO THE EXISTING PIPE SHALL BE DISINFECTED PRIOR TO INSTALLATION IN ACCORDANCE WITH AWWA C651, 1992 EDITION. THIS TAPPING SLEEVE AND THE EXTERIOR OF THE MAIN TO BE TAPPED SHALL BE DISINFECTED BY SPRAYING OR SWABING PER SECTION II OF AWWA C651-92.

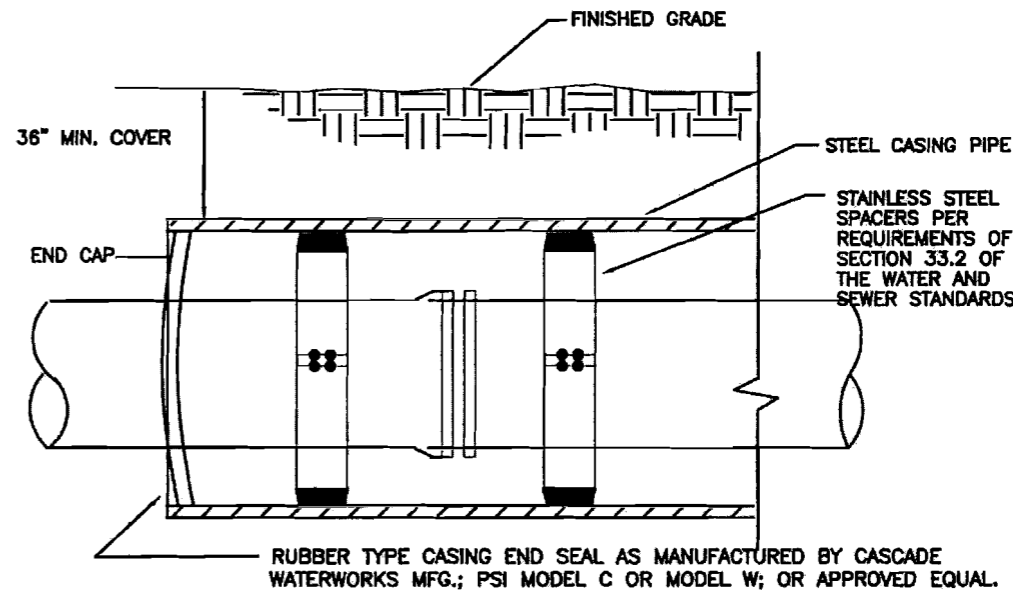
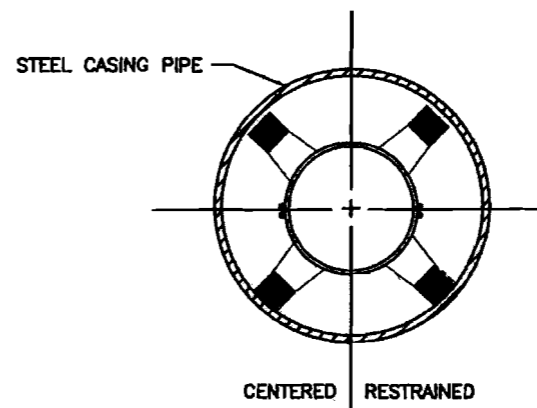
TEMPORARY JUMPER CONNECTION

FITTINGS	MINIMUM LENGTH OF RESTRAINED PIPE TO BE INSTALLED ON EACH SIDE OF FITTING					
	PIPE SIZE (INCHES)					
	10"	12"	16"	20"	24"	30"
90° BEND	48	52	68	80	92	110
45° BEND	23	26	33	40	46	55
22 1/2° BEND	12	13	17	20	23	28
11 1/4° BEND	6	7	9	10	12	14
BRANCH OF TEE	82	87	126	153	180	216
DEAD ENDS	84	100	130	158	184	221

- NOTES:
1. INSTALL FULL LENGTH JOINTS WITH TOTAL NUMBER OF JOINTS EQUAL TO OR GREATER THAN SHOWN IN THE TABLE AND FOR THE TOTAL EQUIVALENT LENGTH REQUIRED.
 2. WHERE TWO OR MORE FITTINGS ARE TOGETHER USE FITTINGS WHICH YIELD THE GREATEST NUMBER OF RESTRAINED JOINTS.
 3. CONTRACTOR SHALL SUBMIT FOR REVIEW AND COMMENT, DRAWINGS FOR RESTRAINED JOINT SYSTEM. ENGINEER APPROVED SHOP DRAWINGS TO BE SUBMITTED TO THE COUNTY.
 4. THE ABOVE REQUIREMENTS WERE CALCULATED IN ACCORDANCE WITH "THRUST RESTRAINT FOR DUCTILE IRON PIPE," SECOND EDITION, 1997, PUBLISHED BY DIPRA, WITH THE FOLLOWING ASSUMPTIONS:
LAYING CONDITION: 3
MINIMUM COVER: 3 FT
SOIL CONDITIONS: SAND/SILT
SAFETY FACTOR: 1.5
TEST PRESSURE: 150 PSI
IF FIELD CONDITIONS DIFFER FROM THE ABOVE, CONTRACTOR SHALL NOTIFY ENGINEER.
 5. THE RESTRAINED JOINT LENGTHS CALCULATED ABOVE FOR BENDS WERE FOR BENDS IN THE HORIZONTAL DIRECTION OR VERTICAL UP DIRECTION. IF A BEND IS ORIENTED IN THE VERTICAL DOWN POSITION, THE RESTRAINED JOINT LENGTH CALCULATED ABOVE FOR THAT BEND SHALL BE MULTIPLIED BY 2.5.
 6. THE JOINTS ON THE RUN OF ALL TEES SHALL BE RESTRAINED.

PIPE RESTRAINT SCHEDULE

3. FLUSHING OF 10" DIAMETER AND LARGER WATER MAINS MAY BE DONE THROUGH THE TE-IN VALVE UNDER VERY CONTROLLED CONDITIONS. THE FOLLOWING PROCEDURES SHALL BE FOLLOWED:
 - A. THE TE-IN VALVES SHALL BE OPERATED AND PRESSURE TESTED IN THE PRESENCE OF THE UTILITY COMPANY AND ENGINEER TO VERIFY WATER TIGHTNESS PRIOR TO TE-IN. VALVES WHICH ARE NOT WATER TIGHT SHALL BE REPLACED OR A NEW VALVE INSTALLED IMMEDIATELY ADJACENT TO THE LEAKING VALVE.
 - B. THE TEMPORARY JUMPER CONNECTION SHALL BE CONSTRUCTED AS DETAILED. THE JUMPER CONNECTION SHALL BE USED TO FILL THE NEW WATER MAIN AND FOR PROVIDING WATER FOR BACTERIOLOGICAL SAMPLING OF THE NEW MAIN AS REQUIRED BY THE PDEP PERMIT.
 - D. FLUSHING SHALL NOT BE ATTEMPTED DURING PEAK DEMAND HOURS OF THE EXISTING WATER MAINS.
 - D. ALL DOWNSIDE VALVES IN THE NEW SYSTEM MUST BE OPEN PRIOR TO OPENING THE TE-IN VALVE.
 - D. PROVIDE FOR AND MONITOR THE PRESSURE AT THE TE-IN POINT. THE PRESSURE IN THE EXISTING MAIN MUST NOT DROP BELOW 35 PSI.
 - D. TE-IN VALVE SHALL BE OPENED A FEW TURNS ONLY, ENSURING A PRESSURE DROP ACROSS THE VALVE IS ALWAYS GREATER THAN 10 PSI.
 - C. THE TE-IN VALVE SHALL BE LOCKED CLOSED BY THE UTILITY COMPANY UNTIL FLUSHING BEGINS.
 - D. THE TE-IN VALVE SHALL BE OPENED ONLY FOR FLUSHING OF THE NEW MAIN. THE PROCEDURE SHALL BE DIRECTED BY THE UTILITY COMPANY AND OBSERVED BY THE ENGINEER.
 - E. AFTER FLUSHING, THE TE-IN VALVE SHALL BE CLOSED AND LOCKED IN THE CLOSED POSITION BY THE UTILITY COMPANY.
4. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION DEMONSTRATING THAT THE DOUBLE CHECK BACKFLOW PREVENTION DEVICE HAS BEEN TESTED WITHIN ONE YEAR AT THE TIME OF INSTALLATION, IN GOOD WORKING ORDER AT THE TIME OF INSTALLATION. THE TEST SHALL BE PERFORMED BY A QUALIFIED BACK FLOW PREVENTION TECHNICIAN AS APPROVED BY SEMINOLE COUNTY'S CROSS-CONNECTION CONTROL PROGRAM.
5. EXCEPT AS REQUIRED TO FLUSH LINES OF GREATER THAN 8" IN DIAMETER, THE TE-IN VALVE SHALL REMAIN CLOSED AND SHALL BE LOCKED IN THE CLOSED POSITION BY THE UTILITY COMPANY. THE TE-IN VALVE SHALL REMAIN LOCKED CLOSED UNTIL THE NEW SYSTEM HAS BEEN CLEARED FOR USE BY PDEP AND ALL OTHER PERTINENT AGENCIES.
6. UPON RECEIPT OF CLEARANCE FOR USE FROM PDEP AND ALL OTHER PERTINENT AGENCIES, THE CONTRACTOR SHALL REMOVE THE TEMPORARY JUMPER CONNECTION. THE CORPORATION STOPS ARE TO BE CLOSED AND PLUGGED WITH 2" BRASS PLUGS.
7. ALL INSTALLATION AND MAINTENANCE OF THE TEMPORARY JUMPER CONNECTION AND ASSOCIATED BACKFLOW PREVENTION DEVICES, FITTINGS, VALVE, ETC., SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.



- NOTES:
1. CASING TO EXTEND 4' MIN. EACH SIDE OF PAVEMENT. FOR CASING SIZE SEE SECTION 33.2 OF THE SEMINOLE COUNTY WATER AND SEWER STANDARDS.
 2. CARRIER PIPE SHALL HAVE RESTRAINED JOINTS UNLESS OTHERWISE WAIVED BY THE MANAGER, DEPENDING ON THE LENGTH OF CASING.
 3. CASING TO BE SIZED PER REQUIREMENTS OF SECTION 33.2 OF THE WATER AND SEWER STANDARDS.
 4. PLACEMENT OF SPACERS SHALL BE REQUIRED PER THE MANUFACTURER'S SPECIFICATIONS.

BORING AND JACKING DETAIL

DESIGNED	VJB
DRAWN	VJB
CHECKED	VJB
KENT VEECH	
PROJECT MANAGER	
APPROVED:	
DATE:	
R. Kent Veech, P.E. FLA. NO. 54101	
CIVIL DISCIPLINE	

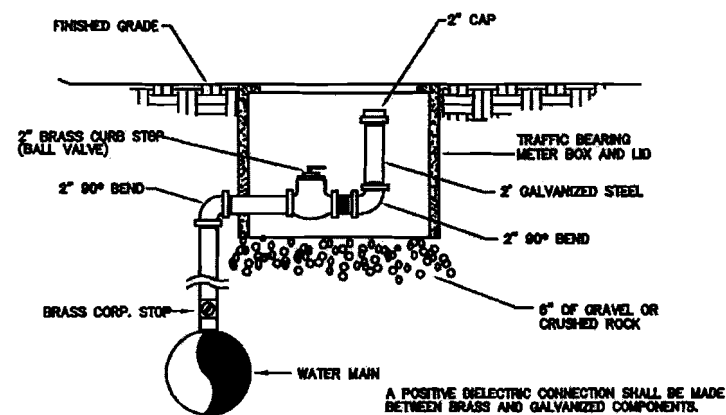


CONSUMER / LAKE HAYES
WATER TRANSMISSION MAIN - PHASE II
SEMINOLE COUNTY ENVIRONMENTAL SERVICES DEPARTMENT

CONSTRUCTION DETAILS

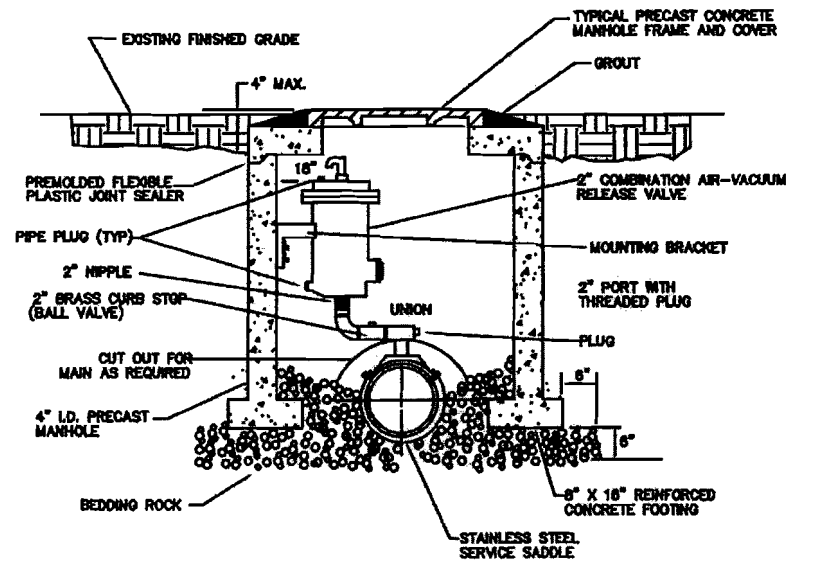
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SCALE	N.T.S.	SHEET NO.	22
OF			

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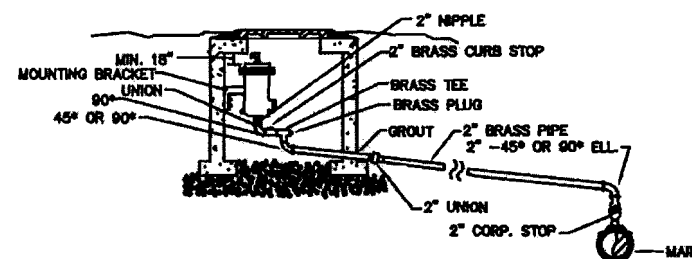
FIRE HYDRANTS ARE HIGHLY PREFERABLE TO IN LINE BLOW-OFF VALVES IN DEVELOPED AREAS.

BLOW-OFF / IN LINE



TYPICAL DETAIL

NOTE: FITTINGS AND PIPE FOR A.R.V. SHALL BE BRASS.



OFFSET INSTALLATION

AIR/VACUUM RELEASE DETAILS

DESIGNED	VJB	APPROVED:	
DRAWN	VJB	DATE:	
CHECKED	VJB	R. Kent Veech, P.E. FLA. NO. 54101	
KENT VEECH		CIVIL DISCIPLINE	
NO.	DATE	REVISION	BY APPR'D PROJECT MANAGER



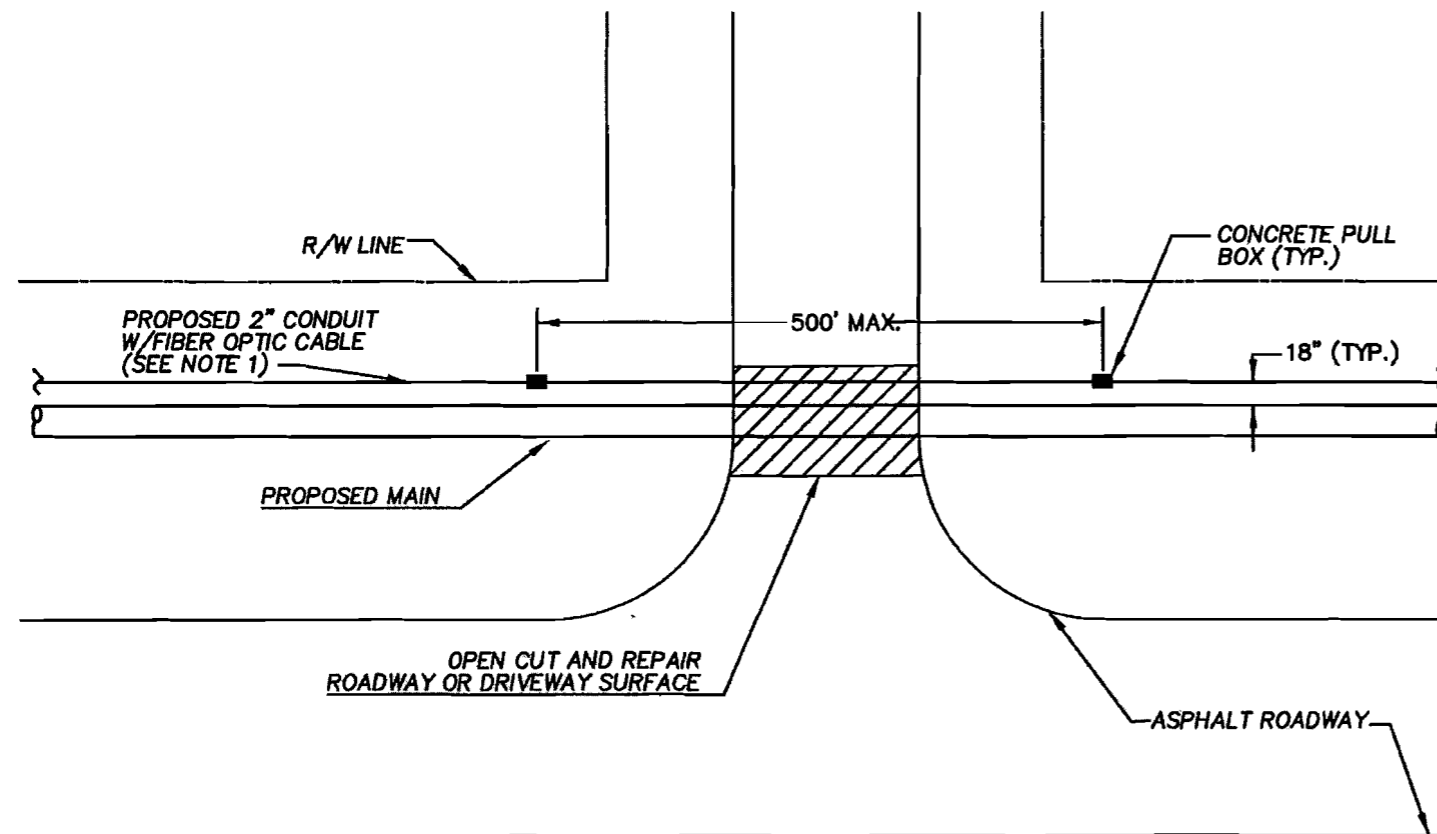
CONSUMER / LAKE HAYES
WATER TRANSMISSION MAIN - PHASE II
SEMINOLE COUNTY ENVIRONMENTAL SERVICES DEPARTMENT

CONSTRUCTION DETAILS

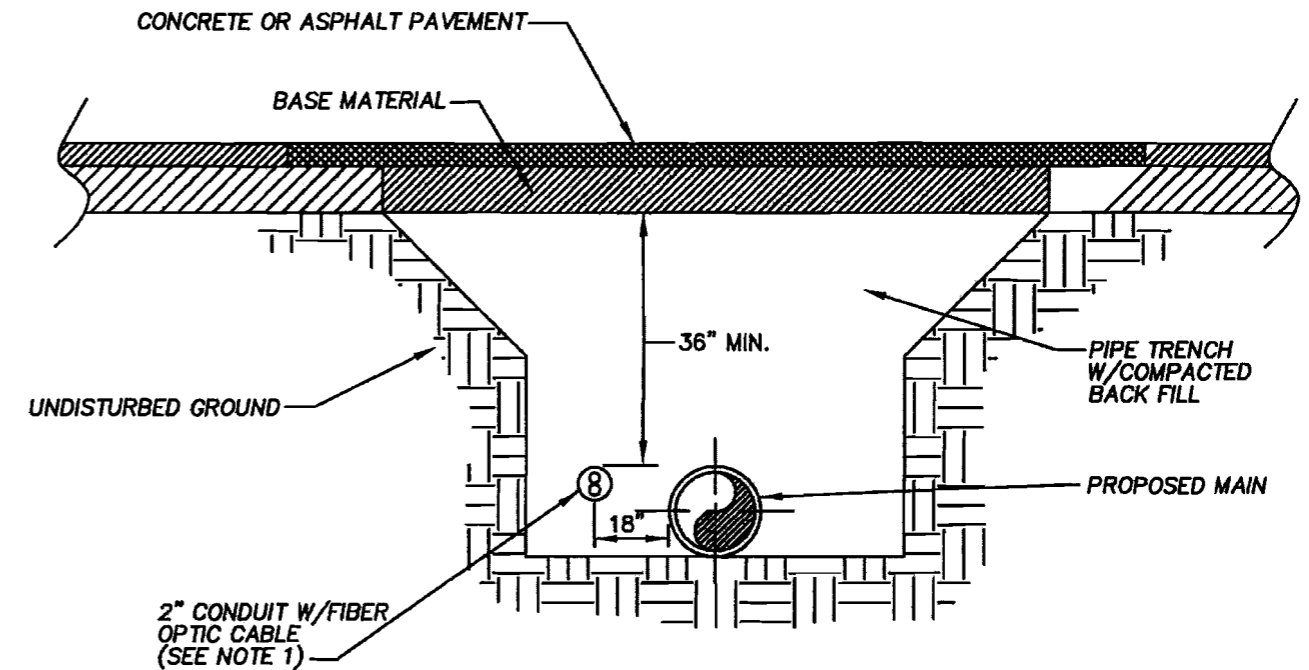
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SCALE	N.T.S.	SHEET NO.	23
OF			

SUB: 80% DRAFTER DATE PROJ. DESIGN DATE SUR. MAN DATE REVW DATE QC DATE BACKCHECK DATE

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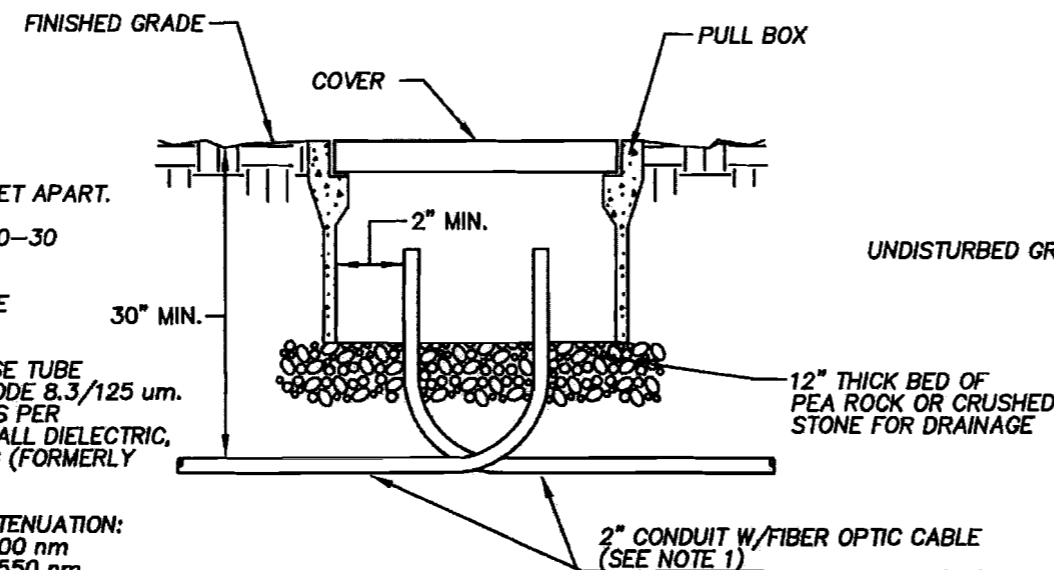
PLAN VIEW



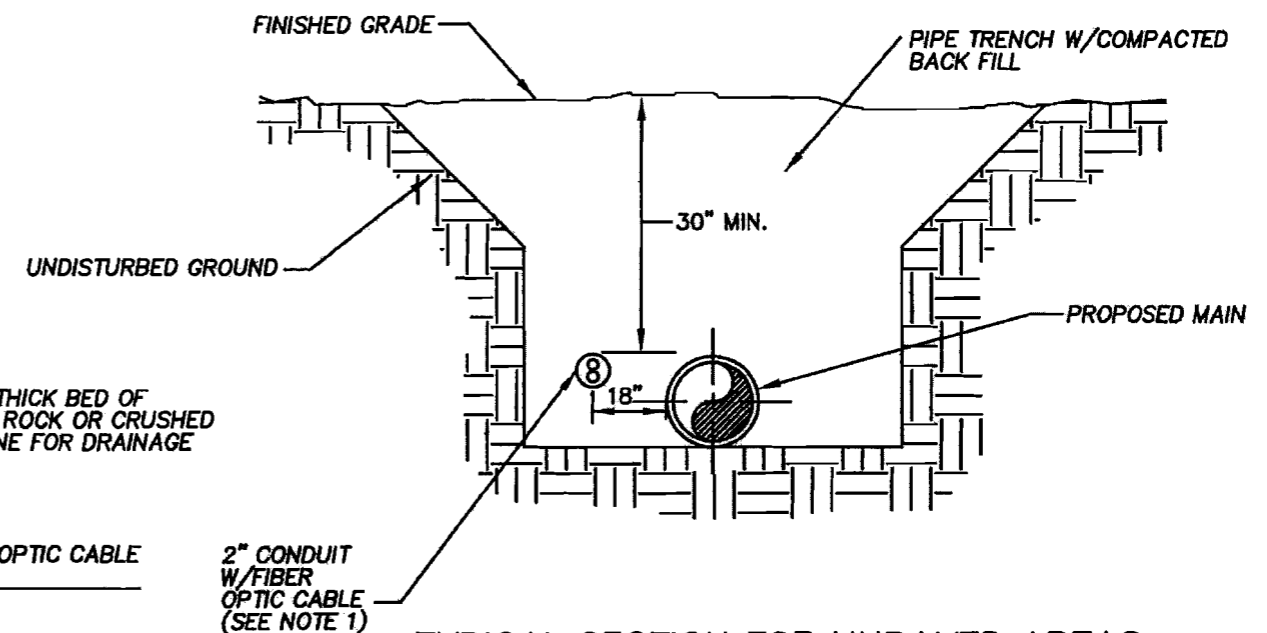
TYPICAL SECTION FOR PAVED AREAS

NOTES:

1. 2" CONDUIT SHALL BE PVC SCHEDULE 40 WITH SOLVENT WELD JOINTS.
2. CONDUIT AND PULL BOX INSTALLATION SHALL BE PER SHEET 2 OF 2 OF FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS INDEX 17721.
3. PULL BOXES SHALL BE SPACED NO MORE THAN 500 FEET APART.
4. PULL BOXES SHALL BE CDR SYSTEM MODEL # A12-1730-30 COMPOSITE BOX WITH BOLT DOWN LID.
5. SEMINOLE COUNTY STANDARD MARKER BALLS SHALL BE USED TO MARK CONDUIT LOCATION.
6. FIBER OPTIC CABLE SHALL BE 48 STRAND HYBRID LOOSE TUBE WITH 24 MULTI-MODE 62.5/125 μ m AND 24 SINGLE MODE 8.3/125 μ m. ADDITIONAL REQUIREMENTS SHALL INCLUDE 6 STRANDS PER BUFFER, KEVLAR YARN, DRY BLOCKED, MINI-BUNDLE, ALL DIELECTRIC, MEDIUM DENSITY POLYETHYLENE JACKET PER CORNING (FORMERLY KNOWN AS SIECOR).
7. ALTOS TO BE IN ACCORDANCE WITH THE FOLLOWING ATTENUATION:
62.5/125: 1.75 db/km @ 850 nm, 1.0 db/km @ 1300 nm
8.3/125: 0.5 db/km @ 1310 nm, 0.4 db/km @ 1550 nm
OR MULTI-MODE FDDI SPECIFICATIONS:
62.5/125: 3.5 db/km @ 850 nm, 1.0 db/km @ 1300 nm
8. A PULL STRING FOR FUTURE USE SHALL BE PULLED INTO CONDUIT WITH FIBER OPTIC CABLE.



PULL BOX ENTRY OF CONDUIT



TYPICAL SECTION FOR UNPAVED AREAS

SCALE: NOT TO SCALE

DESIGNED	VJB	APPROVED:	
DRAWN	VJB	DATE:	
CHECKED	VJB	R. Kent Veech, P.E. FLA. NO. 54101	
KENT VEECH		CIVIL DISCIPLINE	
NO.	DATE	REVISION	BY
			APPROD PROJECT MANAGER



CONSUMER / LAKE HAYES
WATER TRANSMISSION MAIN - PHASE II
SEMINOLE COUNTY ENVIRONMENTAL SERVICES DEPARTMENT

CONSTRUCTION DETAILS

DATE	9-4-07	PROJECT NO.	106048.002
SCALE	N.T.S.	SHEET NO.	24
FILENAME	47-DETAILS	OF	

SUB: BOB DRAFTER DATE: PROJ DESIGN DATE: SUR MAN DATE: REVW DATE: PROJ MAN DATE: QC DATE: BACKCHECK DATE: